

研究業績
自然システム学系

研究論文

生物学コース

- N. Fujii, M. Teramoto, R.H. Ree, N. Shirai, C. Suyama, K. Ueda and H. Takahashi
Relict distribution in *Pedicularis spicata* Pall. (Orobanchaceae): a new locality in Central Honshu, Japan. *Acta Phytotax. Geobot.* Vol. 65, pp. 75–87, (2014)
- C. Suyama and K. Ueda
Persicaria geocarpica Suyama & K.Ueda (Polygonaceae), sp. nov., and its endemism and subterranean cleistogamy. *Acta Phytotax. Geobot.* Vol. 63, 135–142, (2013)
- N. Fujii, K. Ueda, Y. Watano and T. Shimizu
Taxonomic revival of *Pedicularis japonica* from *P. chamissonis* (Orobanchaceae). *Acta Phytotax. Geobot.* Vol. 63, 87–97, (2013)
- Usio N, Negishi JN 2014. Freshwater biodiversity in human-dominated landscapes: introduction. Special Feature on Freshwater biodiversity in human-dominated landscapes *Limnology* 15: 199–200.
- Tanikawa A, Usio N, Ohwaki A, Endo C, Miyashita T 2014, A new species of *Pardosa* (Araneae: Lycosidae) from Sadogashima Is., Japan. *Acta Arachnologica* 63: 23–25.
- Bashar K and Tuno N. 2014. Seasonal abundance of *Anopheles* mosquitoes and their association with meteorological factors and malaria incidence in Bangladesh. *Parasites & Vectors* 7:442. doi:10.1186/1756-3305-7-442.
- Disney RH L, Nitta M, Kobayashi M and Tuno N. 2014 July. New records of Megaselia (Diptera: Phoridae) reared from fungus sporophores in Japan, including five new species. *Applied Entomology and Zoology*. DOI: 10.1007/s13355-014-0284-9.
- Mogi M and Tuno N. 2014. Impact of climate change on the distribution of *Aedes albopictus* (Diptera: Culicidae) in northern Japan: retrospective analyses and future projection. *Journal of Medical Entomology* 51 (3): 572–579.
- 寺下貴晃, 鈴木降介, 木村一也, 大河原恭祐 2014. 金沢市に分布するトノサマガエル *Rana nigromaculata* の形態変異について 爬虫両棲類学会報2014 (1): 1–9.
- Usio N, Imada M, Nakagawa M, Akasaka M, Takamura N 2013. Effects of pond draining on biodiversity and water quality of farm ponds. *Conservation Biology* 27: 1429–1438.
- Kasuya T, Tuno N, Hashiya M, Kurokawa E, Uno K, and Hosaka K. 2013. Nesting ecology of Japanese mole, *Mogera wogura*, through observation on fruiting of *Hebeloma radicosum* (Basidiomycota, Fungi) in Komatsu, Ishikawa Prefecture, with notes of phylogenetic placement of Japanese specimens of

H. radicosum. *Memoirs of the Komatsu City Museum* No.47: 23–34.

- Farjana T. and Tuno N. 2013 Multiple blood feeding and host-seeking behavior in *Aedes aegypti* and *Aedes albopictus* (Diptera: Culicidae). *Journal of Medical Entomology* 50 (4): 838–846.
- Bashar K, Tuno N, Ahmed, TU and Howlader JA. 2013. False positive of circumsporozoite protein (CSP)-ELISA in zoophilic anophelines in Bangladesh. *Acta Tropica* 125 (2):220–5.
- Tajili H and Ohkawara K 2013. The effects of flooding and plowing on foraging site selection by wintering dabbling ducks in rice fields. *Ornithological Science*, 12 (2), pp. 127–136
- Farjana T. and Tuno N. 2012. Effect of body size on multiple blood feeding and egg retention of *Aedes aegypti* (L.) and *Aedes albopictus* (Skuse) (Diptera: Culicidae). *Medical Entomology and Zoology* 63 (2): 1–9.
- Bashar K, Tuno N, Ahmed, TU and Howlader JA. 2012. Blood-feeding patterns of the Anopheles mosquitoes in a malaria-endemic area of Bangladesh. *Parasites & Vectors* 2012, 5:39 doi:10.1186/1756-3305-5-39
- Farjana T, Tuno N, Higa Y. 2012 Effect of temperature and diet on the development and interspecific competition of *Aedes aegypti* and *Aedes albopictus* (Diptera: Culicidae). *Medical and Veterinary Entomology* 26: 210–217
- Larson ER, Abbott CL, Usio N, Azuma N, Wood KA, Herborg L-M, Olden JD 2012. The signal crayfish is not a single crayfish: cryptic diversity and invasions in the Pacific Northwest range of *Pacifastacus*. *Freshwater Biology* 57: 1823–1838.
- Koizumi I, Usio N, Kawai T, Azuma N, Masuda R 2012. Loss of genetic diversity means loss of geological information: the endangered Japanese crayfish exhibits remarkable historical footprints. *PLoS ONE* 7: e33986.
- Kobayashi K, Tamura K, Okamoto M, Hasegawa E, Ohkawara K 2012. Phylogenetic relationships among populations of *Vollenhovia* ants, with particular focus on the evolution of wing morphology. *Annals of the Entomological Society of America*, 105 (2), pp. 1–8
- 福山厚子・長谷川和久・木下栄一郎・奥野正幸. 2013. 酸性雨ストレスなどから緑環境を保全 – 酸性水灌水がクロマツの生長へ及ぼす影響. 農業および園芸 88:225–231.
- 鯨幸夫, 前野寿有, 山口順司, 寺沢なお子, 木下栄一郎. 2012. ヤブツルアズキ (*Vigna angularis* var. *nipponensis*) の成長におよぼす栽培環境の影響. 北陸作物学会 47:113–118.
- K. Yachiguchi, N. Matsumoto, Y. Haga, M. Suzuki, C. Matsumura, M. Tsurukawa, T. Okuno, T. Nakano, K. Kawabe, K. Kitamura, A. Toriba, K. Hayakawa,

- V.S. Chowdhury, M. Endo, A. Chiba, T. Sekiguchi, M. Nakano, Y. Tabuchi, T. Kondo, S. Wada, H. Mishima, A. Hattori, N. Suzuki
 Polychlorinated biphenyl (118) activates osteoclasts and induces bone resorption in goldfish. Env. Sci. Poll. Res., 21, pp.6365–6372 (2014)
- Y. Tabuchi, S. Wada, M. Ikegame, A. Kariya, Y. Furusawa, N. Hoshi, T. Yunoki, N. Suzuki, I. Takasaki, T. Kondo, Y. Suzuki, Y
 Development of oral epithelial cell line ROE2 with differentiation potential from transgenic rats harboring temperature-sensitive simian virus 40 large T-antigen. Exp. Anim., 63, pp.31–44 (2014)
- N. Suzuki, Y. Maruyama, M. Nakano, A. Hattori, M. Honda, Y. Shimazaki, T. Sekiguchi, H. Mishima, S. Wada, A.K. Srivastav, K. Hayakawa, Y. Oshima
 Increased prostaglandin E2 has a positive correlation with plasma calcium during goldfish reproduction. J. Fac. Agr., Kyushu Univ., 59, pp. 97–101 (2014)
- A. Kumar, M.R. Prasad, N. Suzuki, S.K. Srivastav, A.K. Srivastav
 Influence of a botanical pesticide, azadirachtin, on ultimobranchial gland of the freshwater catfish *Heteropneustes fossilis*. Toxicol. Env. Chem., <http://dx.doi.org/10.1080/02772248.2014.895365> (on line) (2014)
- Y. Tabuchi, T. Yunoki, N. Hoshi, N. Suzuki, T. Takashi
 Genes and gene networks involved in sodium fluoride-elicited apoptosis accompanying endoplasmic reticulum stress in oral epithelial cells. Int. J. Mol. Sci., 15, pp.8959–8978 (2014)
- K. Yachiguchi, T. Sekiguchi, M. Nakano, A. Hattori, M. Yamamoto, K. Kitamura, M. Maeda, Y. Tabuchi, T. Kondo, H. Kamauchi, H. Nakabayashi, A.K. Srivastav, K. Hayakawa, T. Sakamoto, N. Suzuki
 Effect of inorganic mercury and methylmercury on osteoclasts and osteoblasts in the scales of the marine teleost as a model system of bone. Zool. Sci., 31, pp.330–337 (2014)
- S. Yano, K. Kitamura, Y. Satoh, M. Nakano, A. Hattori, T. Sekiguchi, M. Ikegame, H. Nakashima, K. Omori, K. Hayakawa, A. Chiba, Y. Sasayama, S. Ejiri, Y. Mikuni-Takagaki, H. Mishima, H. Funahashi, T. Sakamoto, N. Suzuki
 Static and dynamic hypergravity responses of osteoblasts and osteoclasts in medaka scales. Zool Sci., 30, pp.217–223 (2013)
- R. Rai, D. Mishra, S.K. Srivastav, N. Suzuki, A.K. Srivastav
 Effects of lead nitrate on histo-cytological alterations of corpuscles of Stannius of stinging catfish, *Heteropneustes fossilis*. Iran. J. Toxicol., 20, pp.823–830 (2013)
- A. Kumar, M.R. Prasad, K. Srivastava, S.K. Srivastav, N. Suzuki, A.K. Srivastav
 Cyto-histopathological alterations in the liver of azadirachtin treated catfish, *Heteropneustes fossilis*. Proc. Nat. Acad. Sci., Section B: Biol. Sci., 83, pp.609–613 (2013)
- A.K. Srivastav, R. Rai, N. Suzuki, D. Mishra, S.K. Srivastav
 Effects of lead on the plasma electrolytes of a freshwater fish, *Heteropneustes fossilis*. Int. Aquat. Res., 5, 4 (2013) (on line)
- S. Tripathi, N. Suzuki, A.K. Srivastav
 Response of serum minerals (calcium, phosphate and magnesium) and endocrine glands (calcitonin cells and parathyroid gland) of wistar rat after chlorpyrifos administration. Microsc. Res. Tech., 76, pp.673–678 (2013)
- K. Kitamura, K. Takahira, M. Inari, Y. Satoh, K. Hayakawa, Y. Tabuchi, K. Ohgai, T. Nishiuchi, T. Kondo, Y. Mikuni-Takagaki, W. Chen, A. Hattori, N. Suzuki
 Zebrafish scales respond differently to in vitro dynamic and static acceleration: analysis of interaction between osteoblasts and osteoclasts. Comp. Biochem. Physiol. Part A, 166, pp.74–80 (2013)
- A.K. Srivastav, R. Rai, N. Suzuki, D. Mishra, D.S.K. Srivastav
 Responses of the prolactin cells of the stinging catfish *Heteropneustes fossilis* following lead intoxication Egypt. J. Aqua. Res., 39, pp.111–114 (2013)
- S. Undap, L. Matsunaga, M. Honda, T. Sekiguchi, N. Suzuki, F. Khalil, X. Qiu, Y. Shimasaki, H. Ando, W. Sato-Okoshi, T. Sunobe, S. Takeda, H. Munehara, Y. Oshima, Y.
 Accumulation of organotins in wharf roach (*Ligia exotica* Roux) and its ability to serve as a biomonitoring species for coastal pollution. Ecotoxicol. Environ. Saf., 96: 75–79 (2013)
- Y. Tabuchi, Y. Sugahara, M. Ikegame, N. Suzuki, K. Kitamura, T. Kondo
 Genes responsive to low-intensity pulsed ultrasound in MC3T3-E1 preosteoblast cells. Int. J. Mol. Sci., 14, pp.22721–22740 (2013)
- A. Kumar, M. Prasad, S.K. Srivastav, N. Suzuki, A.K. Srivastav
 Toxicological impacts of a botanical pesticide, azadirachtin on corpuscles of Stannius of stinging catfish, *Heteropneustes fossilis*. Int. J. Environ. Sci. Technol., DOI 10.1007/s13762-013-0422-x (on line) (2013)
- 三島弘幸, 井上昌子, 門田理佳, 服部淳彦, 鈴木信雄, 篠光夫, 松本敬, 里村一人, 見明康雄
 象牙質の成長線の周期と体内時計の情報伝達分子のメラトニンの分泌リズムの関連. 日本再生歯科医学雑誌, 11, pp.27–39 (2013)
- T. Sekiguchi, M. Ogasawara, H. Satake
 Molecular and functional characterization of cionin

- receptors in the ascidian, *Ciona intestinalis*: The evolutionary origin of the vertebrate cholecystokinin/gastrin family. *J. Endocrinol.*, 213, pp.99–106 (2012)
- K. Omori, S. Wada, Y. Maruyama, A. Hattori, K. Kitamura, Y. Sato, M. Nara, H. Funahashi, K. Yachiguchi, K. Hayakawa, M. Endo, R. Kusakari, S. Yano, A.K. Srivastav, T. Kusui, S. Ejiri, W. Chen, Y. Tabuchi, Y. Furusawa, T. Kondo, Y. Sasayama, T. Nishiuchi, M. Nakano, T. Sakamoto, N. Suzuki
Prostaglandin E2 increases both osteoblastic and osteoclastic activities in the scales of goldfish and participates in the calcium metabolism in goldfish. *Zool. Sci.*, 29, pp.499–504 (2012)
- T.A. Thamamongoood, R. Furuya, S. Fukuba, M. Nakamura, N. Suzuki, A. Hattori
Expression of osteoblastic and osteoclastic genes during spontaneous regeneration and autotransplantation of goldfish scale: A new tool to study intramembranous bone regeneration. *Bone*, 50, pp.1240–1249 (2012)
- S. Yano, D. Masuda, H. Kasahara, K. Omori, A. Higashibata, M. Asashima, T. Ohnishi, F. Yatagai, S. Kamisaka, T. Furusawa, A. Higasitani, H. Majima, T. Nikawa, K. Wakabayashi, H. Takahashi, H. Suzuki, T. Shimazu, A. Hattori, F. Tanigaki, M. Shirakawa, M. Takaoki, T. Nakamura, Y. Yoshimura, N. Suzuki, N. Ishioka
Excellent thermal control ability of cell biology experiment facility (CBEF) on ground basis experiments and board experiments in kibo of the international space station. *Biol. Sci. Space*, 26, pp.12–20 (2012)
- N. Suzuki, T. Sekiguchi, H. Satake, K. Kato, Y. Nishiyama, H. Takahashi, J.A. Danks, T.J. Martin, A. Hattori, M. Nakano, M. Kakikawa, S. Yamada, M. Ogoshi, S. Hyodo, Y. Yamaguchi, C.S. Chowdhury, K. Hayakawa, H. Funahashi, T. Sakamoto, Y. Sasayama
Cloning of two members of the calcitonin receptor family from stingray, *Dasyatis akajei*: Possible physiological roles of the calcitonin family in osmoregulation. *Gene*, 499, pp.90–95 (2012)
- M. Kakikawa, T. Yamamoto, V.S. Chowdhury, Y. Satoh, K. Kitamura, T. Sekiguchi, H. Funahashi, K. Omori, M. Endo, S. Yano, S. Yamada, K. Hayakawa, A. Chiba, A.K. Srivastav, K. Ijiri, A. Hattori, N. Suzuki
Determination of calcium sensing receptor in the scales of goldfish and induction of its mRNA expression by acceleration loading. *Biol. Sci. Space*, 26, pp.26–31 (2012)
- K. Kitamura, Y. Satoh, M. Inari, K. Takahira, W. Okesaku, M. Endo, S. Yano, T. Yamamoto, A. Kaminishi, R. Akatsuka, A. Hattori, A. N. Suzuki
Osteoblasts and osteoclasts in goldfish regenerating scales respond to mechanical loading: Analysis of osteoblastic and osteoclastic marker mRNA expression. *Biol. Sci. Space*, 26, pp.42–46 (2012)
- Yamada M, Yamada T (2014) *Pinus fujii* (Yasui) Miki from the Middle Miocene Saikawa Formation in Kanazawa, Ishikawa Prefecture, Japan. *Journal of Phytogeography and Taxonomy* 62: 29–31.
- Yamada T, Yamada M, Tsukagoshi M (2014) Fossil records of subsection *Pinus* (genus *Pinus*, Pinaceae) from the Cenozoic in Japan. *Journal of Plant Research* 127: 193–208.
- Legrand J, Yamada T, Nishida H (2014) Palynofloras from the upper Barremian–Aptian Nishihiro Formation (Outer Zone of SW Japan) and the appearance of angiosperms in Japan. *Journal of Plant Research* 127: 221–232.
- Yamada T, Nishida H (2014) Palaeobotany: Old but new stories on plant diversity. *Journal of Plant Research* 127: 185–186.
- Kofuji R, Hasebe M (2014) Eight types of stem cells in the life cycle of the moss *Physcomitrella patens*. *Current Opinion in Plant Biology* 17: 13–21.
- Sekine D, Ohnishi T, Furuumi H, Ono A, Yamada T, Kurata N, Kinoshita T (2013) Dissection of two major components of the post-zygotic hybridization barrier in rice endosperm. *The Plant Journal* 76: 792–799.
- Katayama N, Kato M, Yamada T (2013) Origin and development of the cryptic shoot meristem in *Zeylanidium lichenoides*. *American Journal of Botany* 100: 635–646.
- Aoyama T, Hiwatashi Y, Shigyo M, Kofuji R, Kubo M, Ito M, Hasebe M (2012) AP2-type transcription factors determine stem cell identity in the moss *Physcomitrella patens*. *Development* 139: 3120–3129.
- Arima H, Horiguchi N, Takaichi S, Kofuji R, Ishida K, Wada K, Sakamoto T (2012) Molecular genetic and chemotaxonomic characterization of the terrestrial cyanobacterium *Nostoc commune* and its neighboring species. *FEMS Microbiol Ecol* 79: 34–45.
- Taketoshi Kiya, Koudai Morishita, Keiro Uchino, Masafumi Iwami, Hideki Sezutsu (2014) PLoS One, 9 (11), e113156.
- Seika Takayanagi-Kiya, Kayo Misawa-Hojo, Take-toshi Kiya, Takekazu Kunieda, and Takeo Kubo (2014) Splicing variants of NOL4 differentially regulate the transcription activity of Mr1 and Mr2 in cultured cells. *Zoological Science*, 31 (11), 735–40.
- Nozomi Fujita, Takumi Nishiuchi, Makoto Sato, Masafumi Iwami, and Taketoshi Kiya (2013) Visualization of neural activity in insect brains using a conserved immediate early gene, Hr38. *Current Biology*, 23 (20), 2063–2070.
- Hiroto Matsui, Motonori Kakei, Masafumi Iwami, and

- Sho Sakurai (2012) Hormonal regulation of the death commitment in programmed cell death of the silkworm anterior silk glands. *Journal of Insect Physiology*, 58 (12), 1575–1581.
- Taketoshi Kiya, Atsushi Ugajin, Takekazu Kunieda, and Takeo Kubo (2012) Identification of kakusei, a nuclear non-coding RNA, as an immediate early gene from the honeybee, and its application for neuroethological study. *International Journal of Molecular Sciences*, 13, 15496–15509, 2012.
- Anuradha Roy, Sakiko Shimizu, Taketoshi Kiya, Kazuei Mita, and Masafumi Iwami (2012) Identification of 20-hydroxyecdysone-inducible genes from larval brain of the silkworm, *Bombyx mori*, and their expression analysis. *Zoological Science*, 29 (5), 333–339.
- Atsushi Ugajin, Taketoshi Kiya, Takekazu Kunieda, Masato Ono, Tadaharu Yoshida, Takeo Kubo (2012) Detection of Neural Activity in the Brains of Japanese Honeybee Workers during the Formation of a 'Hot Defensive Bee Ball'. *PLoS ONE*, 7 (3):e32902. 2012.
- Nangle, SN., Rosensweig, C., Koike, N., Tei, H., Takahashi, JS., Green, CB., Zheng, N. Molecular assembly of the period-cryptochrome circadian transcriptional repressor complex. (2014) *Elife* 3, e03674.
- Nazifi, E., Wada, N., Yamaba, M., Asano, T., Nishiuchi, T., Matsugo, S. and Sakamoto, T. (2013) Glycosylated porphyra-334 and palythine-threonine from the terrestrial cyanobacterium *Nostoc commune*. *Mar. Drugs* 11:3124–3154.
- Matsui, K., Nazifi, E., Hirai, Y., Wada, N., Matsugo, S. and Sakamoto, T. (2012) The cyanobacterial UV-absorbing pigment scytonemin displays radical-scavenging activity. *J. Gen. App. Microbiol.* 58:137–144.
- Arima, H., Horiguchi, N., Takaichi, S., Kofuji, R., Ishida, K., Wada, K. and Sakamoto, T. (2012) Molecular genetic and chemotaxonomic characterization of the terrestrial cyanobacterium *Nostoc commune* and its neighboring species. *FEMS Microbiol. Ecol.* 79:34–45.
- Numoto, N., Nakagawa, T., Ohara, R., Hasegawa, T., Kita, A., Yoshida, T., Maruyama, T., Imai, K., Fukumori, Y., and Miki, K. The structure of a deoxygenated 400 kDa haemoglobin reveals ternary- and quaternary-structural changes of giant haemoglobins. *Acta Cryst. D70*:1823–1831, (2014).
- Taoka, A., Eguchi, Y., Mise, S., Oestreicher, Z., Uno, F., and Fukumori Y. A magnetosome-associated cytochrome MamP is critical for magnetite crystal growth during the exponential growth phase. *FEMS Microbiol. Lett.* 358 (1):21–29, (2014).
- Taoka, A., Kondo, J., Oestreicher, Z., and Fukumori, Y. Characterization of uncultured giant rod-shaped magnetotactic Gammaproteobacteria from a fresh water pond in Kanazawa, Japan. *Microbiology-SGM*. 160: cover page and 2226–2234, (2014).
- Sato, W., Mizuuchi, R., Irioka, N., Komatsuda, S., Kawata, S., Taoka, A., and Ohkubo Y. Extranuclear dynamics of 111Ag (\rightarrow 111Cd) doped in AgI nanoparticles. *Chemical Physics Letters* 609:104–107, (2014).
- Jandaruang, J., Siripetawee, J., Songsiriritthigul, C., Preecharram, S., Taoka, A., Dhiravosit, A., Fukumori, Y., and Thammasirirak S. Purification, Characterization, and Crystallization of *Crocodylus siamensis* Hemoglobin. *Protein J.* 33 (4):377–385, (2014).
- Sato, N., Ishii, S., Sugimoto, H., Hino, T., Fukumori, Y., Sako, Y., Shiro, Y., and Toshia T. Structures of reduced and ligand-bound nitric oxide reductase provide insights into functional differences in respiratory enzymes. *Proteins: Structure, Function and Bioinformatics* 82 (7):1258–1271, (2014).
- Noguchi, A., Ikeda, A., Mezaki, M., Fukumori, Y., and Kanemori, M. DnaJ-promoted binding of DnaK to multiple sites on σ^{32} in the presence of ATP. *J. Bacteriol.* 196 (9):1694–1703, (2014).
- Sakaguchi, S., Taoka, A., and Fukumori, Y. Analysis of Magnetotactic Behavior By Swimming Assay. *Biosci. Biotech. Biochem.* 77 (5):940–947, (2013).
- Yamanaka, M., Ishizaki, Y., Nakagawa, T., Taoka, A., Fukumori, Y. Purification and Characterization of Coacervate-Forming Cuticular Proteins from *Papilio xuthus* Pupae. *Zoological Science* 30 (7):534–542, (2013).
- Yamashita, H., Taoka, A., Uchihashi, T., Asao, T., Ando, T., Fukumori, Y. Single molecule imaging on living bacterial cell surface by high-speed AFM. *J Mol Biol.* 422 (2):300–309, (2012).
- Suzuki, H., Ikeda, A., Tsuchimoto, S., Adachi, K., Noguchi, A., Fukumori, Y., and Kanemori, M. Synergistic binding of DnaJ and DnaK chaperone to the heat shock transcription factor σ^{32} assures its characteristic high metabolic instability: Implications for the heat shock protein 70 (Hsp70)-Hsp40 mode of function. *J. Biol. chem.* 287 (23):19275–19283, (2012).
- Amemiya, S., Omori, A., Tsurugaya, T., Hibino, T., Yamaguchi, M., Kuraishi, R., Kiyomoto, M., and Minokawa, T. (2014) Early stalked stages in ontogeny of the living isocrinid sea lily *Metacrinus rotundus*.

Acta Zoologica, doi: 10.1111/azo.12109.

- Yamazaki, A., Kidachi, Y., Yamaguchi, M., and Minokawa, T. (2014) Larval mesenchyme cell specification in the primitive echinoid occurs independently of the double-negative gate. *Development* 141 (13), 2669–2679.
- Tsuchimoto, J. and Yamaguchi, M. (2014) *Hox* expression in the direct-type developing sand dollar *Peronella japonica*. *Developmental Dynamics*, 239 (12), 3391–3403.
- Urata, M., Iwasaki, S., Ohtsuka, S., and Yamaguchi, M. (2014) Development of the swimming acorn worm *Glandiceps hacksii*: similarity to holothroids. *Evolution & Development* 16 (3), 149–154.
- Amemiya, S., Hibino, T., Nakano, H., Yamaguchi, M., Kuraishi, R., and Kiyomoto, M. (2013) Development of ciliary bands in larvae of the living isocrinoid sea lily *Metacrinus rotundus*. *Acta Zoologica*, doi: 10.1111/azo.12049.
- Shiomi, K., Yamazaki, A., Kagawa, M., Kiyomoto, M., and Yamaguchi, M. (2012) Par6 regulates skeletogenesis and gut differentiation in sea urchin larvae. *Development Genes & Evolution* 222 (5), 269–278.
- Osada E, Akematsu T, Asano T, Endoh H (2010) A novel mitochondrial nuclease-associated protein: A major executor of the programmed nuclear death in *Tetrahymena thermophila*. *Biol. Cell*, 106, 97–109.
- Hashizume C, Moyori A, Kobayashi A, Yamakoshi N, Endo A and Wong RW (2013) Nucleoporin Nup62 maintains centrosome homeostasis. *Cell Cycle* 15;12 (24):3804–16. doi: 10.4161/cc.26671.
- Hashizume C, Kobayashi A and Wong RW (2013) Down-modulation of nucleoporin RanBP2-induced chromosome mis-alignment and mitotic catastrophe. *Cell Death Dis.* 4, e854; doi:10.1038/cddis.2013.370
- Endo A, Moyori A, Kobayashi A and Wong RW (2013) Nuclear Mitotic Apparatus protein, NuMA modulates p53 mediated transcription in cancer cells. *Cell Death Dis.* 4:e713. doi: 10.1038/cddis.2013.239.
- Funasaka T, Balan V, Raz A, and Wong RW (2013) Nucleoporin Nup98 mediates galectin-3 nuclear-cytoplasmic trafficking. *Biochem. Biophys. Res. Commun.* 434 (1): 155–161.
- Funasaka T, Tsuka E and Wong RW (2012) Regulation of autophagy by Nucleoporin Tpr. *Sci. Rep.* 2: 878 DOI:10.138/srep00878
- Ohnishi H, Tochio H, Kato Z, Kawamoto N, Kimura T, Kubota K, Yamamoto T, Funasaka T, Nakano H, Wong RW, Shiragawa M and Kondo N (2012) TRAM is involved in IL-18 signaling and func-
- tions as a sorting adaptor for MyD88 PLoS ONE;7 (6):e38423. doi: 10.1371/journal.pone.0038423.
- ### バイオ工学コース
- #### 原著論文（英文かつ査読ありのもの）
- Kazuaki Ninomiya, Takashi Yamauchi, Chiaki Ogino, Nobuaki Shimizu, Kenji Takahashi, Microwave pre-treatment of lignocellulosic material in cholinium ionic liquid for efficient enzymatic saccharification, *Biochem Eng. J.*, 90 (15) 90–95 (2014) Sep.
- Kazuaki Ninomiya, Aya Fukuda, Chiaki Ogino, and Nobuaki Shimizu, Targeted and sonocatalytic cancer cell injury using avidin-conjugated TiO₂ nanoparticles, *Ultrason. Sonochem.*, 21 (5), 1624–1628 (2014) Sep.
- Kazuma Ogura, Kazuaki Ninomiya, Kenji Takahashi, Chiaki Ogino, Akihiko Kondo. Pretreatment of Japanese cedar by ionic liquid solutions in combination with acid and metal ion, and its application to high solid loading. *Biotechnology for Biofuels*, 7, 120 (2014) Aug.
- Kazuaki Ninomiya, Takahiro Yamashita, Shinya Kawabata, and Nobuaki Shimizu, Targeted and ultrasound-triggered drug delivery using liposomes co-modified with cancer cell-targeting aptamers and a thermosensitive polymer, *Ultrason. Sonochem.*, 21 (4), 1482–1488 (2014) July.
- Kazuaki Ninomiya, Ryuji Yamada, Hitomi Meisaku, Nobuaki Shimizu, Effect of ultrasound irradiation on bacterial internalization and bacteria-mediated gene transfer to cancer cells, *Ultrason. Sonochem.*, 21 (3), 1187–1193 (2014) May.
- Soh, Z., Saito, M., Kurita, Y., Takiguchi, N., Otake, H., Tsuji, T., A comparison between the human sense of smell and neural activity in the olfactory bulb of rats, *Chemical Senses*, 39 (2), 91–105 (2014) Feb.
- Kazuaki Ninomiya, Shinya Kawabata, Hiroyuki Tashita, and Nobuaki Shimizu Ultrasound-mediated drug delivery using liposomes modified with a thermosensitive polymer. *Ultrason. Sonochem.*, 21 (1), 310–316 (2014) Jan
- Kazuaki Ninomiya, Kyohei Noda, Chiaki Ogino, Shunichi Kuroda, and Nobuaki Shimizu. Enhanced OH radical generation by dual-frequency ultrasound with TiO₂ nanoparticles: its application to targeted sonodynamic therapy. *Ultrason. Sonochem.*, 21 (1), 289–294 (2014) Jan.
- K. Kuroda, H. Kunimura, Y. Fukaya, H. Ohno, ¹H NMR evaluation of polar and non-deuterated ionic liquids for selective extraction of cellulose and xylan from wheat bran, *ACS Sustain. Chem. Eng.*, in press (2014)
- K. Kuroda, H. Kunimura, Y. Fukaya, H. Ohno, ¹H NMR analysis of cellulose in ionic liquids, *Cellulose*, 4 (21), 2199–2206 (2014)

- R. Kakuchi, Multicomponent reactions in polymer synthesis *Angew. Chem. Int. Ed.*, 53 (1), 46–48 (2014)
- R. Kakuchi, K. Wongsanoh, V. P. Hoven, P. Theato, Activation of stable polymeric esters by using organo-activated acyl transfer reactions *J. Polym. Sci. Part A*, 52 (9), 1353–1358 (2014)
- R. Kakuchi P. Theato, Efficient multicomponent post-polymerization modification based on kabachnik-fields reaction. *ACS Macro. Lett.*, 3 (4), 329–332 (2014) (Highlighted in Synfacts, T. M. Swager, E. S. Stern, *Synfacts*, 10 (06), 0592–0592 (2014))
- R. Kakuchi, P. Theato, Preparation of functional polyamine scaffolds via mitsunobu Post-polymerization modification reactions *Macromol. Rapid Commun.*, 35 (6), 661–665 (2014)
- R. Kakuchi, P. Theato, Sequential post-polymerization modification reactions of poly (pentafluorophenyl 4-vinylbenzenesulfonate), *Polym. Chem.*, 5 (7), 2320–2325 (2014)
- T. Edwards, T. Endo, J. H. Walton, S. Sen, Observation of the transition state for pressure-induced $\text{BO}_3 \rightarrow \text{BO}_4$ conversion in glass, *Science*, 345, 1027–1029 (2014)
- R. M. Musat, T. Kondoh, Y. Yoshida, K. Takahashi, Twin-peaks absorption spectra of excess electron in ionic liquids, *Radiation Physics and Chemistry*, 100, 32–37 (2014)
- T. Endo, M. Imanari, H. Seki, S. Sen and K. Nishikawa , Fast Cation Dynamics in the Crystalline State of an Imidazolium-Based Room Temperature Ionic Liquid due to the Presence of a Tiny Amount of H_2O , *Solid State Ionics*, Vol. 259, 41–45 (2014)
- D. C. Kaseman, T. Endo and S. Sen, Structural disorder and the effects of aging in a phosphate glass: Results from two-dimensional ^{31}P PASS NMR spectroscopy, *Journal of Non-Crystalline Solids*, Vol. 59, 33–39 (2013)
- Kazuaki Ninomiya, Tatsuo Ishijima, Masatoshi Imamura, Takayuki Yamahara, Hiroshi Enomoto, Kenji Takahashi, Yasunori Tanaka, Yoshihiko Uesugi, Nobuaki Shimizu, Evaluation of extra- and intracellular OH radical generation, cancer cell injury, and apoptosis induced by a non-thermal atmospheric pressure plasma jet, *J. Phys. D: Appl. Phys.*, 46 (42), 425401 ninomiya (2013) Oct.
- Kazuaki Ninomiya, Chiaki Ogino, Shinya Kawabata, Kentaro Kitamura, Teruya Maki, Hiroshi Hasegawa, Nobuaki Shimizu. Ultrasonic inactivation of *Microcystis aeruginosa* in the presence of TiO_2 particles, *J. Biosci. Bioeng.*, 116 (2) 214–218 (2013) Aug.
- Kazuaki Ninomiya, Hiromi Takamatsu, Ayaka Ohnishi, Kenji Takahashi, Nobuaki Shimizu. Sonocatalytic-Fenton reaction for enhanced OH radical generation and its application to lignin degradation, *Ultrason. Sonochem.*, 20 (4) 1092–1097 (2013). July.
- Kazuaki Ninomiya, Kazuhiko Kaneda, Satoshi Kawashima, Yusuke Miyachi, Chiaki Ogino, Nobuaki Shimizu. Cell-SELEX based selection and characterization of DNA aptamer recognizing human hepatocarcinoma, *Bioorg. Med. Chem. Lett.*, 23 (6) 1797–1802 (2013). March.
- Kazuaki Ninomiya, Masayuki Arakawa, Chiaki Ogino, and Nobuaki Shimizu: Inactivation of *Escherichia coli* by sonoelectrocatalytic disinfection using TiO_2 as electrode. *Ultrason. Sonochem.* 20 (2), 762–767 (2013). March.
- Kazuaki Ninomiya, Takashi Yamauchi, Masafumi Kobayashi, Chiaki Ogino, Nobuaki Shimizu, Kenji Takahashi. Cholinium carboxylate ionic liquids for pretreatment of lignocellulosic materials to enhance subsequent enzymatic saccharification, *Biochem Eng. J.*, 71, 25–29 (2013). Feb
- Kazuaki Ninomiya, Ryuji Yamada, Masami Matsumoto, Satoru Fukuya, Takane Katayama, Chiaki Ogino, and Nobuaki Shimizu: Image analyzing method to evaluate in situ bioluminescence from an obligate anaerobe cultivated under various dissolved oxygen concentrations. *J. Biosci. Bioeng.*; 115 (2), 196–199. (2013) Feb
- Kazuaki Ninomiya, Akiko Ohta, Sayuri Omote, Chiaki Ogino, Kenji Takahashi, Nobuaki Shimizu. Combined use of completely bio-derived cholinium ionic liquids and ultrasound irradiation for the pretreatment of lignocellulosic material to enhance enzymatic saccharification, *Chem Eng. J.*, 215–216, 811–818 (2013). Jan.
- Kazuaki Ninomiya, Hiroshi Soda, Chiaki Ogino, Kenji Takahashi, Nobuaki Shimizu. Effect of ionic liquid weight ratio on pretreatment of bamboo powder prior to enzymatic saccharification, *Bioresour. Technol.*, 128, 188–192 (2013). Jan.
- R. Kakuchi, P. Theato, Three-component reactions for post-polymerization modifications, *ACS Macro. Lett.*, 2 (5), 419–422 (2013)
- T. Endo, H. Murata, M. Imanari, N. Mizushima, H. Seki, S. Sen, K. Nishikawa, A comparative study of the rotational dynamics of PF_6^- Anions in the crystals and liquid states of 1-butyl-3-methylimidazolium Hexafluorophosphate: results from ^{31}P NMR spectroscopy, *The Journal of Physical Chemistry B*, 117, 326 – 332 (2013)
- T. Endo, K. Nishikawa, Thermal phase behavior of 1-butyl-3-methylimidazolium Hexafluorophosphate: Simultaneous measurements of the melting of two polymorphic crystals by raman spectroscopy and calorimetry, *Chemical Physics Letters*, 584, 79–82 (2013)
- T. Endo, H. Masu, K. Fujii, T. Morita, H. Seki, S. Sen, K. Nishikawa, Determination of missing crystal struc-

- tures in the 1-alkyl-3-methylimidazolium hexafluorophosphate series: implications on structure-property relationships, *Crystal Growth & Design*, 13, 5383–5390 (2013)
- K. Kuroda, Y. Fukaya, H. Ohno, Direct HPILC analysis on cellulose depolymerisation in ionic liquids, *Anal. Methods*, 13 (5), 3172–3176 (2013)
- E. V. Saenko, K. Takahashi, V. I. Feldman, EPR evidence for a physically trapped excess electron in a glassy ionic liquid, year the document was publish, *Journal of Physical Chemistry Letters*, 4 (17), 2896–2899 (2013)
- M. Imanari, K. Fujii, T. Endo, H. Seki, K. Tozaki and K. Nishikawa, Ultraslow Dynamics at Crystallization of a Room-Temperature Ionic Liquid, 1-Butyl-3-methylimidazolium Bromide, *The Journal of Physical Chemistry B*, Vol. 116, 3991 – 3997 (2012)
- Kazuaki Ninomiya, Chiaki Ogino, Shuhei Oshima, Shiro Sonobe, Shun'ichi Kuroda and Nobuaki Shimizu, Targeted sonodynamic therapy using protein-modified TiO₂ nanoparticles, *Ultrason. Sonochem.*, 19 (3) 607–614 (2012) May.
- Kazuaki Ninomiya, Kazuki Kamide, Kenji Takahashi and Nobuaki Shimizu. Enhanced enzymatic saccharification of kenaf powder after ultrasonic pre-treatment in ionic liquids at room temperature, *Bioresour. Technol.*, 103 (1) 259–265 (2012) Jan
- R. Kakuchi, M. Zamfir, J.-F. Lutz, P. Theato, Controlled positioning of activated ester moieties on well-defined linear polymer chains, *Macromol. Rapid Commun.*, 33 (1), 54–60 (2012)
- R. Kakuchi, P. Theato, Changing the reactivity of polymeric activated esters by temperature: on-off switching of the reactivity of poly (4-acryloxyphenyldimethylsulfonium triflate), *Macromolecules*, 45 (3), 1331–1338 (2012)
- T. Endo, H. Murata, M. Imanari, N. Mizushima, H. Seki ,K. Nishikawa, NMR study of cation dynamics in three crystalline states of 1-Butyl-3-methylimidazolium hexafluorophosphate exhibiting crystal polymorphism, *The Journal of Physical Chemistry B*, 116, 3780 – 3788 (2012)
- T. Endo, S. Widgeon, P. Yu, S. Sen, K. Nishikawa, Cation and anion dynamics in supercooled and glassy states of the ionic liquid 1-butyl-3-methylimidazolium hexafluorophosphate: Results from ¹³C, ³¹P, and ¹⁹F NMR spectroscopy, *Physical Review B*, 85, 054307 (2012)
- Masami Mizushima, Takanobu Kawamura, Kenji Takahashi, Koh-hei Nitta, Characterization of molecular orientation under tensile deformation by near infrared spectroscopy, e-Polymers, no.068 (2012) Aug
- Soh, Z., Tsuji, T., Takiguchi, N., Ohtake, H., A neural network model for olfactory glomerular activity prediction, *AIP Conference Proceedings*, 1504, 1261–1264 (2012)
- Naoko Ikuta, Akira Tanaka, Ayako Otsubo, Noriko Ogawa, Hiromitsu Yamamoto, Tomoyuki Mizukami, Shoji Arai, Masayuki Okuno, Keiji Terao and Seiichi Matsugo, Spectroscopic Studies of R (+)-Alpha-Lipoic Acid - Cyclodextrin Complexes, *Int. J. Mol. Sci.* 15, 20469–20485 (2014)
- Tuba Esatbeyoglu, Anika E. Wagner, Rouhollah Motafakkerazad, Yu Nakajima, Seiichi Matsugo, Gerald Rimbach, Free radical scavenging and antioxidant activity of betanin: Electron spin resonance spectroscopy studies and studies in cultured cells, *Food and Chemical Toxicology* 73, 119–126 (2014)
- Seiichi Matsugo, Hironori Sugiyama, Yuki Nishimoto, Hirofumi Misu, Toshinari Takamura, Shuichi Kaneko, Yukari Kubo, Reina Sato, Kan Kanamori, Cytotoxicity and Enhancement of the Insulin Signaling Pathway Induced by Peroxidovanadium (V) Complexes, *Inorganic Chimica Acta* 420, 53–59 (2014)
- Fei Lan, Hirofumi Misu, Keita Chikamoto, Hiroaki Takayama, Akihiro Kikuchi, Kensuke Mohri, Noboru Takata, Hiroto Hayashi, Naoto Matsuzawa-Nagata, Yumie Takeshita, Hiroyo Noda, Yukako Matsumoto, Tsuguhiro Ota, Toru Nagano, Masa-toshi Nakagen, Ken-ichi Miyamoto, Kanako Takatsuki, Toru Seo, Kaito Iwayama, Kunpei Tokuyama, Seiichi Matsugo, Satoshi Yamagoe, Shuichi Kaneko, and Toshinari Takamura, LECT2: The hepatokine that links obesity to insulin resistance in skeletal muscle, *Diabetes* 63, 1649–1664 (2014)
- Hiroaki Takayama , Hirofumi Misu, Hisakazu Iwama, Keita Chikamoto, Koji Murao, Atsushi Teraguchi, Fei Lan, Reina Saito, Natsumi Hirose, Takayoshi Shirasaki, Seiichi Matsugo, Ken-ichi Miyamoto, Shuichi Kaneko,Toshinari Takamura, Metformin Suppresses Expression of the Selenoprotein P gene via an AMPK-FoxO3a Pathway in H4IIEC3 Hepatocytes, *J. Biol. Chem.* 289 (1), 335–345 (2014)
- Sibylle Nikolai, Patricia Huebbe,, Cornelia C. Metges, Anke Schloesser, Janina Dose, Almut Nebel, Naoko Ikuta, Keiji Terao, Seiichi Matsugo, Gerald Rimbach, R-alpha lipoic acid gamma cyclodextrin complex improves energy expenditure and counteracts inflammatory gene expression, *Nutrition* , 30 (2), 228–233 (2014)
- Kei Gunjima, Ryoichi Tomiyama, Ken Takakura, Takashi Yamada, Koji Hashida, Tetsuya Konishi, Seiichi Matsugo, Osamu Hori, 3,4-Dihydroxybenzalacetone protects against Parkinson's disease-related neurotoxin 6-OHDA through Akt/Nrf2/glutathione pathway, *J. Cellular Biochem.* 115, 151–160, (2014)
- Naoko Ikuta, Yukiko Uekaji, Daisuke Nakata, Keiji Terao and Seiichi Matsugo, Safety evaluation of R (+)-alpha lipoic acid-gamma cyclodextrin

- complex, *J. Biochem. Pharmacol. Res.*, 1, 212–218, (2013)
- Yoshiki Koriyama, Yuya Nakayama, Seiichi Matsugo, Kayo Sugitani, Kazuhiro Ogai, Tsuneo Takadera, Satoru Kato, Anti-inflammatory effects of lipoic acid through inhibition of GSk-3beta in lipopolysaccharide-induced BV2 microglial cells. *Neurosci. Res.*, 77, 87–96 (2013)
- Ehsan Nazifi, Naoki Wada, Minami Yamaba, Tomoya Asano, Takumi Nishiuchi, Seiichi Matsugo, Toshio Sakamoto, Glycosylated porphyrin-334 and mycosporine-threonine: novel mycosporine-like amino acids from the terrestrial Nostoc commune, *Marine Drugs*, 11, 3124–3153 (2013)
- Naoko Ikuta, Hironori Sugiyama, Hiroshi Shimosegawa, Rie Nakane, Yoshiyuki Ishida, Yukiko Uekaji, Daisuke Nakata, Kathrin Pallauf, Gerald Rimbach, Keiji Terao and Seiichi Matsugo, Analysis of the enhanced stability of R (+)-alpha lipoic acid by the complex formation with cyclodextrins, *Int. J. Mol. Sci.*, 14, 3639–3655 (2013)
- Hiromitsu Michikoshi, Takahiro Nakamura, Katsuya Sakai, Yoshinori Suzuki, Eri Adachi, Kunio Matsu-moto, and Seiichi Matsugo, α-Lipoic Acid-Induced Inhibition of Proliferation and Met Phosphorylation in Human Non-Small Cell Lung Cancer Cells, *Cancer Letters*, 335, 472–478 (2013)
- Yoshiki Koriyama, Yuya Nakayama, Seiichi Matsugo, Satoru Kato, Protective effect of lipoic acid against oxidative stress is mediated by Keap1/Nrf2-dependent heme oxygenase-1 induction in the RGC-5 cell Line, *Brain Res.*, 499, 145–157 (2013)
- Hironori Sugiyama, Seiichi Matsugo, Hirofumi Misu, Toshinari Takamura, Shuichi Kaneko, Youhei Kanatani, Mikako Kaido, Chie Mihara, Nilka Abeywardana, Ayana Sakai, Kyouhei Sato, Yoshitaro Miyashita, Kan Kanamori, Regulation of the physiological effects of peroxidovanadium (V) complexes by the electronic nature of ligands, *J. Inorganic Biochem.*, 121, 66–76 (2013)
- Kan Kanamori, Hiroshi Kataoka, Seiichi Matsugo, A Vanadium Based Chemical Oscillator: Identification of Chemical Species Responsible for the Redox Reaction and Construction of a Simplified Model, *Eur. J. Inorg. Chem.*, 4570–4573, (2012)
- Hironori Sugiyama, Seiichi Matsugo, Tetsuya Konishi, Toshinari Takamura, Shuichi Kaneko, Yukari Kubo, Kyouhei Sato, Kan Kanamori, Synthesis, Structure, and Physiological Effects of Peroxovanadium (V) Complexes Containing Amino Acid Derivatives as Ancillary Ligands, *Chem. Lett.* 41, 377–379 (2012)
- K. Matsui, E. Nazil, Y. Hirai, N. Wada, S. Matsugo, T. Sakamoto, The cyanobacterial UV-absorbing pigment scytonemin displays radical-scavenging activity, *J. Gen. & Applied Microbiol.*, 58, 137–144 (2012)
- (2012)
- ### 国際会議
- Yoshiki Shibata, Ryohei Kakuchi, Kenji Takahashi; Direct chemical reaction and fractionation of seaweed biomass into polysaccharide and lignin derivatives, Renewable Chemicals from Lignin, p.28, Royal Society of Chemistry, London, UK (2014) Nov. 18 (Poster)
- Kenji Takahashi; Solvation Dynamics of Excess Electron in Ionic Liquid, The 5th Asia Pacific Symposium on Radiation Chemistry (APSRC2014), p.96, Hongo Campus, The University of Tokyo, Tokyo, (2014) Sep. 8–11 (Oral)
- Elizaveta Saenko, Ekaterina S Shiryaeva, Kenji Takahashi, Vladimir Feldman; Excess electron in irradiated glassy ionic liquids at low temperature, The 5th Asia Pacific Symposium on Radiation Chemistry (APSRC2014), p.123, Hongo Campus, The University of Tokyo, Tokyo, (2014) Sep. 8–11 (Oral)
- Raluca Musat, Takafumi Kondo, Yoichi Yoshida, Kenji Takahashi; Radiolytic Yields and Solvation Dynamics of Excess Electron in RTILs, The 5th Asia Pacific Symposium on Radiation Chemistry (APSRC2014), p.185, Hongo Campus, The University of Tokyo, Tokyo, (2014) Sep. 8–11 (Poster)
- Toshiki KAGA, Kenji Takahashi; Reaction of chemical species produced by DC pulse discharge plasma on water surface, The 5th Asia Pacific Symposium on Radiation Chemistry (APSRC2014), p.146, Hongo Campus, The University of Tokyo, Tokyo, (2014) Sep. 8–11 (Poster)
- Kazumasa Furusawa, Kenji Takahashi; Spectrometry and Captured Reaction of Chemical Active Species Formed in Microwave Excited Bubble Plasma, The 5th Asia Pacific Symposium on Radiation Chemistry (APSRC2014), p.144, Hongo Campus, The University of Tokyo, Tokyo, (2014) Sep. 8–11
- Raluca Musat, Takafumi Kondo, Yoichi Yoshida, Kenji Takahashi; Solvation dynamics of excess electrons in low temperature ionic liquid, Chemistry and Physics at Low Temperatures (CPLT-2014), p.23, Suzdal, Russia (2014) Aug. 24–29 (Oral)
- Elizaveta V. Saenko, Ekaterina S. Shiryaeva, Kenji Takahashi and Vladimir I. Feldman; Excess electrons in irradiated glassy pyrrolidinium- and piperidinium-type ionic liquids at low temperature, Chemistry and Physics at Low Temperatures (CPLT-2014), p.61, Suzdal, Russia (2014) Aug. 24–29
- Tatsuo Ishijima, Yuko. Imazawa, T. Ito, Masatoshi Imamura, Kazuaki Ninomiya, Kenji Takahashi, Yasunori Tanaka, and Yoshihiko Uesugi; Investigation of Chemical Species Production Rates in Aqueous Solution Irradiated by Non-equilibrium Atmospheric Pressure Jet, Proceedings of the 5th Inter-

- national Conference on Plasma Medicine (ICPM5), p.249, Nara (2014) May 20 (Poster)
- Tatsuo Ishijima, Yuko Imazawa, Kazuaki Ninomiya, Kenji Takahashi, Yasunori Tanaka, and Yoshihiko Uesugi; Investigation of OH radical generation rate in liquid induced by non-equilibrium atmospheric pressure plasma jet irradiation, Proceedings of the 66th Annual Gaseous Electronics Conference (GEC2013), p47, Princeton (2013) Oct. 1. (Poster)
- Tatsuo Ishijima, Takayuki Yamahara, Masatoshi Imamura, Kazuaki Ninomiya, Kenji Takahashi, Yasunori Tanaka, and Yoshihiko Uesugi; Fundamental Study of OH Radical Generation Rate Induced by Low Frequency Plasma Jet, Proceedings of the The 9th Asian-European International Conference on Plasma Surface Engineering (AEPSE2013), P4-29, Cheju (2013) Aug. 29
- Kazuaki Ninomiya, and Kenji Takahashi: Biomass refinery using ionic liquids, Proceedings of the 33th International Conference on Solution Chemistry, Post Symposium on Ionic Liquids from Science to Green Chemical Application, p. 10, Tokyo (2013) July 13 (Oral)
- Yuki Nishizawa, Yuta Takamizawa, Yuka Aomori, Ken Inoue, Kazuaki Ninomiya, Kenji Takahashi: Reaction of lignin dissolved in ionic liquid, Proceedings of the 33th International Conference on Solution Chemistry, Post Symposium on Ionic Liquids from Science to Green Chemical Application, p. 29, Tokyo (2013) July 13 (Poster)
- Yuka Aomori, Yuki Ueda, Ken Inoue, Kazuaki Ninomiya, Kenji Takahashi: Application of lignin fractionated by ionic liquid to resin, Proceedings of the 33th International Conference on Solution Chemistry, Post Symposium on Ionic Liquids from Science to Green Chemical Application, p. 30, Tokyo (2013) July 13 (Poster)
- Kazuaki Ninomiya and Kenji Takahashi: Pretreatment of lignocellulosic biomass using ionic liquid, Proceedings of the 2013 Korean Society for Microbiology and Biotechnology KMB's 40th Anniversary International Symposium, IS4-2, Pyeongchang, Gangwondo (2013) July 4 (Oral)
- Kazuaki Ninomiya, Chiaki Ogino, Kenji Takahashi, and Nobuaki Shimizu: Bio-derived ionic liquids for pretreatment of lignocellulosic biomass, Proceedings of the 5th Congress on ionic liquids (COIL5), P108, Algarve (2013) April 22 (Poster)
- Tatsuo Ishijima, Takayuki Yamahara, Masatoshi Imamura, Kazuaki Ninomiya, Kenji Takahashi, Yasunori Tanaka, and Yoshihiko Uesugi; Investigation of chemical reactions in aqueous solution irradiated by non-equilibrium atmospheric pressure plasma jet using chemical probe, 1st International Workshop on Solution Plasma and Molecular Technologies (SPM-1), J-08, Tokyo (2013) March. 8 (Poster?)
- Hiroshi Enomoto, Kohei Kato, Noboru Hieda, Tatsuo Ishijima, Kazuaki Ninomiya, Yoshihiko Uesugi, Toshio Nakatani; Observation of water droplet in non-equilibrium plasma, Proceedings of the 6th International Conference on Plasma Nanotechnology and Science (IC-PLANTS 2013)., P-A04, Gero (2013) Feb.2 (Poster)
- Takayuki Yamahara, Tatsuo Ishijima, Masatoshi Imamura, Kazuaki Ninomiya, Kenji Takahashi, Yasunori Tanaka, and Yoshihiko Uesugi; Detection of OH Radicals in the Liquid produced by Nonthermal Atmospheric Pressure Jet Irradiation, Proceedings of the 6th International Conference on Plasma Nanotechnology and Science (IC-PLANTS 2013)., P-A03, Gero (2013) Feb. 2 (Poster)
- Takayuki Yamahara, Tatsuo Ishijima, Masatoshi Imamura, Kazuaki Ninomiya, Kenji Takahashi, Yasunori Tanaka, and Yoshihiko Uesugi; Fundamental study of dissolved OH radicals in the liquid produced by atmospheric pressure plasma jet, Proceedings of the 5th International Symposium on Advanced Plasma Science and Its Application for Nitrides and Nanomaterials (ISPlasma 2013)., p208, Nagoya (2013) Jan. 31
- Tatsuo Ishijima, Takayuki Yamahara, Masatoshi Imamura, Kazuaki Ninomiya, Kenji Takahashi, Yasunori Tanaka, and Yoshihiko Uesugi; Investigation of Chemical Reactions in Aqueous Solution Irradiated by Atmospheric Pressure Low Frequency Plasma Jet using Chemical Probe, The 13th International Symposium on Biomimetic Materials Processing (BMMP-13), J-16, Takayama (2013) Jan. 25 (Poster)
- Kazuaki Ninomiya, Chiaki Ogino, Kenji Takahashi, and Nobuaki Shimizu: Bio-derived ionic liquids for pretreatment of lignocellulosic biomass, Proceedings of the 18th Symposium of Young Asian Biochemical Engineers' Community (YABEC) 2012, p.132, Tokushima (2012) Oct 27 (Poster)

物質循環工学コース

- Tamura, K. and Alwi, R.S.
Solubility of anthraquinone derivatives in supercritical carbon dioxide. Dyes and Pigments, 113 (2015) pp. 351-356
- Zulkafli, Z.D., Wang, H., Miyashita, F., Utsumi, N., Tamura, K.
Cosolvent-modified supercritical carbon dioxide extraction of phenolic compounds from bamboo leaves (*Sasa palmata*). J. Supercritical Fluids, 94, pp. 123-129 (2014).
- R. S. Alwi, T. Tanaka, K. Tamura
Measurement and correlation of solubility of anthraquinone dyestuffs in supercritical carbon dioxide, J. Chem. Thermodynamics, 74 (2014) pp.119-

- 125.
- E. Tatsukawa, K. Tamura
Activity correction on electrochemical reaction and diffusion in lithium intercalation electrodes for discharge/charge simulation by single particle model, *Electrochimica Acta* 115 (2014) pp. 75–85.
- K. Tamura, R. A. Surya, and T. Tanaka
SOLUBILITIES OF AMINOANTHRAQUINONE DERIVATIVES IN SUPERCRITICAL CARBON DIOXIDE. Proceeding of 10th International Conference on Separation Science and Technology (IC-SST14), Nara, pp.1-4 (2014)
- K. Tamura and T. Kasuga
Solid-Liquid Equilibria for Peritectic and Eutectic Organic Compound Forming System. Abstract of 7th International and the 9th China-Japan Symposium on Calorimetry and Thermal Analysis, CATS2014. Hanzou, (2014)
- F.Kobayashi, T.Maki, M.Kakikawa, M.Yamada, F.Puspitasari, Y.Iwasaka
Bioprocess of Kosa bioaerosols effect of ultraviolet radiation on airborne bacteria within Kosa (Asian dust), *Journal of Bioscience and Bioengineering* (in press 2014)
- M.Yamada, K.Nakamura, T.Kameda, F.Kobayashi, A.Matsuki, H.Tsuiki, S.Higaki, Y.Iwasaka, K.Hayakawa
Design of functional fibers with metallophthalocyanine derivatives to adsorb low-molecular weight polycyclic aromatic hydrocarbons and inhibit growth of *Bacillus* spp. *Chemical and Pharmaceutical Bulletin* (in press 2014)
- T.Higashi, Y.Kambayashi, N.Ohkura, M.Fujimura, S.Nakanishi, T.Yoshizaki, K.Saijoh, K.Hayakawa, F.Kobayashi, Y.Michigami, Y.Hitomi, H.Nakamura
Exacerbation of daily cough and allergic symptoms in adult patients with chronic cough by Asian Dust: A hospital-based study in Kanazawa, Atmospheric Environment (in press 2014)
- T.Maki, F.Puspitasari, K.Hara, M.Yamada, F.Kobayashi, H.Hasegawa, Y.Iwasaka
Variations in the structure of airborne bacterial communities in a downwind area during an Asian dust (Kosa) event, *Science of the Total Environment*, Vol.488, No.489, 75–84 (2014)
- T.Higashi, Y.Kambayashi, N.Ohkura, M.Fujimura, S.Nakai, Y.Honda, K.Saijoh, K.Hayakawa, F.Kobayashi, Y.Michigami, A.E.Olando, Y.Hitomi, H.Nakamura
Effects of Asian dust on daily cough occurrence in patients with chronic cough: A panel study, Atmospheric Environment, Vol.92, 506–513 (2014)
- 東朋美, 神林康弘, 藤村政樹, 大倉徳幸, 吉崎智一, 中西清香, 西條清史, 早川和一, 小林史尚, 道上義正, 人見嘉哲, 中村裕之
黄砂とアレルギー疾患, エアロゾル研究, 第29巻, 特別号, 212–217 (2014)
- B.Liu, T.Ichinose, M.He, F.Kobayashi, T.Maki, S.Yoshida, Y.Yoshida, K.Arashidani, H.Takano, M.Nishikawa, G.Sun, T.Shibamoto
Lung inflammation by fungus, *Bjerkandera adusta* isolated from Asian sand dust (ASD) aerosol and enhancement of ovalbumin-induced lung eosinophilia by ASD and the fungus in mice, *Allergy, Asthma, and Clinical Immunology*, Vol.10, No.10, 1–12 (2014)
- 志賀野明, 高山哲生, 瀧健太郎, 伊藤浩志
ポリプロピレン/モンモリロナイト複合材料の力学特性に及ぼす炭酸カルシウム微粒子分散の影響, 日本機械学会論文集, 80 (819), 14–00274 (2014).
- Taki, Kentaro, Yoshihito Watanabe, Hiroshi Ito, Masahiro Ohshima
Effect of Oxygen Inhibition on the Kinetic Constants of the UV-Radical Photopolymerization of Diurethane Dimethacrylate/Photoinitiator Systems, *Macromolecules*, 47 (6), 1906–1913 (2014).
- Taki, Kentaro, Hideyuki Hayashizaki, Kiyoshi Fukada
A Simplified Bubble Nucleation, Growth and Coalescence Model for Coke Production Process, *ISIJ International*, 54 (11), 2493–2502 (2014).
- Ito, Akihiro, Takeshi Semba, Kentaro Taki, Masahiro Ohshima
Effect of the molecular weight between crosslinks of thermally cured epoxy resins on the CO₂-bubble nucleation in a batch physical foaming process, *Journal of Applied Polymer Science*, 131 (12), 40407 (2014).
- Tatsukawa, E., Ikeda, T., Tamura, K.
Application of Gibbs energy model to equilibrium potential for structural phase transition in lithium intercalation process. *Fluid Phase Equilibria* 357, pp.19–23 (2013)
- Tamura, K., K. Tomohiro and Nakamura, T.
Surface Modification of Metal Oxide Nanoparticles with Polyacrylic Acid in Supercritical Carbon Dioxide, *SuperGreen 2013*, Proceedings of the 8th International Conference on Supercritical Fluids, Kaohsiung, pp.1–4 (2013), invited.
- A. Ratna, K. Tamura
Solubilities of Anthraquinone Dyestuffs in Supercritical Carbon Dioxide. Book of 33rd International Conference on Solution Chemistry, Kyoto (2013)
- 牧輝弥, 福島理英, 小林史尚, 山田丸, 岩坂泰信
大気中を風送される細菌叢の16S rDNA-クローニングライブラリー解析, 分析化学, Vol.62, No.12, 1095–1104 (2013)
- 牧輝弥, 原和崇, 山田丸, 小林史尚, 長谷川浩, 岩坂泰信
バイオエアロゾルの蛍光顕微鏡観察, エアロゾル研究, 第28巻, 第3号, 201–207 (2013)
- T.Maki, F.Kobayashi, M.Yamada, H.Hasegawa, Y.Iwasaka
NaCl-amendment assay targeting airborne bac-

- teria in tropospheric bioaerosols transported by westerly wind over Noto Peninsula, *Aerobiologia*, Vol.29, No.3, 341–354 (2013)
- R.Nakai, E.Shibata, A.Justel, E.Rico, A.Quesada, F.Kobayashi, Y.Iwasaka, G.-Y.Shi, Y.Amano, T.Iwatsuki, T.Naganuma
Phylogeographic analysis of filterable bacteria with special reference to Rhizobiales strains that occur in cryospheric habitats, *Antarctic Science*, Vol.25, No.2, 219–228 (2013)
- T.Maki, M.Kakikawa, F.Kobayashi, M.Yamada, A.Matsuki, H.Hasegawa, Y.Iwasaka
Assessment of composition and origin of airborne bacteria in the free troposphere over Japan, *Atmospheric Environment*, Vol.74, 73–82 (2013)
- Taki, Kentaro, Kazunori Hosokawa, Shota Takagi, Hiroyuki Mabuchi, Masahiro Ohshima
Rapid production of ultralow dielectric constant porous polyimide films via CO₂-tert-amine zwitterion induced phase separation and subsequent photopolymerization, *Macromolecules*, 46 (6), 2275–2281 (2013).
- Okaji, Rika, Kentaro Taki, Shinsuke Nagamine, Masahiro Ohshima
Preparation of a unique, multihollow-core honeycomb structure via the unidirectional freezing of a binary solvent system, *Journal of Applied Polymer Science*, 130 (1), 526–534 (2013).
- Okaji, Rika, Shota Sakashita, Kohei Tazumi, Kentaro Taki, Shinsuke Nagamine, Masahiro Ohshima
Interconnected Pores on the Walls of a Polymeric Honeycomb Monolith Structure Created by the Unidirectional Freezing of a Binary Polymer Solution, *Journal of Materials Science*, 48 (5), 2038–2045 (2013).
- Li, H., Zhang, T., Fu, W., Tamura K.
Liquid–liquid phase behaviors of geraniol in aqueous alcohol mixtures. *J. Chemical and Engineering Data* 57 (1), pp. 148–154 (2012)
- C.Chokradjaroen, X. Li, Tamura, K.
Mutual solubility measurements and correlations of imidazolium-based ionic liquid mixtures with alcohols, *J. Chem. Thermodynamics*, 46, pp. 72–79 (2012)
- K.Tamura, K.Urano, S.Mochiduki, T.Kaijo, A.Horise
Titanium OxideNanoparticles Modified Chemically with Polyacrylic Acid in Supercritical Carbon Dioxide. Proceedings of 10th International Symposium on Supercritical Fluids, San Francisco, pp. 1–5 (2012)
- K.Tamura
SOLUBILITY OF THREE-PRIMARY-COLORS DISPERSE DYES AND THEIR BLENDS IN SUPERCRITICAL CARBON DIOXIDE. Abstract of 15th International symposium on Solubility Phenomena and Related Equilibrium Processes, Xining, (2012) (invited)
- Tatsukawa, E., Ikeda, T., Tamura, K.
Application of Gibbs energy model for structurally phase transition in lithium intercalation electrode. The 6th International Symposium on Molecular Thermodynamics and Molecular Simulation, Proceedings of MTMS2012, Higashi-Hiroshima, pp.1–4 (2012)
- Tamura, K., Kamata, H., Akamatsu, K.
Glass transition temperatures of polyacrylic acids in high pressure carbon dioxide., The 6th International Symposium on Molecular Thermodynamics and Molecular Simulation, Proceedings of MTMS2012 Higashi-Hiroshima, pp.1–4 (2012)
- F.Kobayashi, T.Maki, Y.Nakamura
Biodegradation of phenol in seawater using bacteria isolated from the intestinal contents of marine creatures, *International Biodeterioration and Biodegradation*, Vol.69, 113–118 (2012)
- Okaji, Rika, Kentaro Taki, Shinsuke Nagamine, Masahiro Ohshima
Preparation of porous honeycomb monolith from UV-curable monomer/dioxane solution via unidirectional freezing and UV irradiation, *Journal of Applied Polymer Science*, 125 (4), 2874–2881 (2012).
- Ishikawa, Takeshi, Kentaro Taki, Masahiro Ohshima
Visual Observation and Numerical Studies of N₂ vs. CO₂ Foaming Behavior in Core-back Foam Injection Molding, *Polymer Engineering and Science*, 52 (4), 875–883 (2012).
- M.Mizushima, T.Kawamura, K.Takahashi, K.Nitta,
In situ near-infrared spectroscopic studies of the structural changes in polyethylene during tensile deformation, *Polymer Testing*, 38, 81–86 (2014).
- 比江嶋祐介, 木田拓充, 新田晃平, ラマン分光から見た高密度ポリエチレンの構造変化, 次世代ポリオレフィン総合研究, 8, 印刷中 (2014).
- 比江嶋祐介, 金久保光央, 脇坂昭弘, エレクトロスプレーを利用した発光性ナノカーボン製造法, ケミカルエンジニアリング, 59, 824–829 (2014).
- T.Uneyama, T.Miyata and K.Nitta, "Self-Consistent Field Model Simulations for Statistics of Amorphous Polymer Chains in Crystalline Lamellar Structures", *J. Chem. Phys.* 141, 164906 (2014).
- Q.Chen and T.Uneyama, "Linear viscoelasticity of unentangled corona blocks and star arms", *Rheol. Acta* 53, 701–714 (2014).
- K.Horio, T.Uneyama, Y.Matsumiya, Y.Masubuchi and H.Watanabe, "Rheo-Dielectric Responses of Entangled cis-Polyisoprene under Uniform Steady Shear and LAOS", *Macromolecules* 47, 246–255 (2014).
- 新田晃平, 李春瑤, 結晶性高分子の一軸延伸下における延性破壊機構について, レオロジー学会誌

- Vol.41, No.3, 167–172 (2013).
- S. Qian, T. Igarashi, K. Nitta, Influence of thermo-degradation on the crystallization kinetics of isotactic polypropylene with a β nucleating agent, *J. Macromol. Sci. -Phys.*, Vol. 52, 48–64 (2013).
- S. Suzuki, T. Uneyama and H. Watanabe, “Concentration Dependence of Nonlinear Rheological Properties of Hydrophobically Modified Ethoxylated Urethane Aqueous Solutions”, *Macromolecules* 46, 3497–3504 (2013).
- K. Nitta, Quantum Mechanical Approach to Ductile Fracture of Extended and Coupled Polymer Chains under Tension, *Philosophical Magazine*, Vol. 92, (35), 4425–4436 (2012).
- M. Mizushima, T. Kawamura, K. Takahashi, K. Nitta, Characterization of molecular orientation under tensile deformation by Near Infrared Spectroscopy, *e-Polymers* 068, 1–11 (2012).
- S. Yoshida, T. Sawada, T. Kawamura, K. Nitta, Molecular orientation behavior of isotactic polypropylene films under uniaxial and biaxial deformation at elevated temperatures, *International Journal of Polymer Processing*, Vol. XXVII, 237–243 (2012).
- K. Nitta, M. Kuriyagawa, Application of Catastrophe Theory to Neck Initiation of Metallocene-catalyzed High Density Polyethylene, *Polymer J.* Vol. 44, 245–251 (2012).
- M. Mizushima, T. Kawamura, K. Takahashi, K. Nitta, In-situ Near Infrared Spectroscopic studies of Structural Changes of Polyethylene during Melting, *Polymer J.* Vol. 44, 162–166 (2012).
- K. Nitta, M. Yamana, Poisson’s Ratio and Mechanical Nonlinearity under Tensile Deformation, *Rheology*, (ISBN 979-953-307-367-4), In-Tech, Chap.5, 113–132 (2012).
- D. Qi, R. Zhang, J. Xu, X. Shen, K. Nitta, A Novel Phenolic Rigid Organic Filler/isotactic Polypropylene Blend, *Advanced Materials Research* Vol. 441, pp 536–539 (2012).
- M. Kuriyagawa, K. Nitta, Semicrystalline Structure and Mechanical Properties of Polyolefin-based Materials, *Advanced Materials Research* Vol. 441, pp 713–716 (2012).
- 水島まさみ, 新田晃平, 結晶性ポリオレフィンの応力場における分子鎖状態変化の分光学的研究, 次世代ポリオレフィン総合研究, 6, 72–77 (2012).
- T. Uneyama and Y. Masubuchi, “Multi-chain Slip-spring Model for Entangled Polymer Dynamics”, *J. Chem. Phys.* 137 154902 (2012).
- T. Uneyama, T. Akimoto and T. Miyaguchi, “Cross-over Time in Relative Fluctuations Characterizes the Longest Relaxation Time of Entangled Polymers”, *J. Chem. Phys.* 137, 114903 (2012).
- T. Uneyama, S. Suzuki and H. Watanabe, “Concentration Dependence of Rheological Properties of Telechelic Associative Polymer Solutions”, *Phys. Rev. E* 86, 031802 (2012).
- Y. Masubuchi, T. Uneyama and K. Saito, “A multi-scale simulation of polymer processing using parameter-based bridging in melt rheology”, *J. Appl. Polym. Sci.* 125, 2740–2747 (2012).
- S. Okuda, T. Uneyama, Y. Inoue, Y. Masubuchi and M. Hojo, “Soft-core Interaction Between Entanglement Segments for Primitive Chain Network Simulations”, *Nihon Reoroji Gakkaishi (J. Soc. Rheol. Jpn.)* 40, 21–30, (2012).
- S. Suzuki, T. Uneyama, T. Inoue and H. Watanabe, “Rheology of Aqueous Solution of Hydrophobically Modified Ethoxylated Urethane (HEUR) with Fluorescent Probes at Chain Ends: Thinning Mechanism”, *Nihon Reoroji Gakkaishi (J. Soc. Rheol. Jpn.)* 40, 31–36, (2012); errata, *Nihon Reoroji Gakkaishi (J. Soc. Rheol. Jpn.)* 40, 117, (2012).
- S. Suzuki, T. Uneyama, T. Inoue and H. Watanabe, “Nonlinear Rheology of Telechelic Associative Polymer Networks: Shear Thickening and Thinning Behavior of Hydrophobically Modified Ethoxylated Urethane (HEUR) in Aqueous Solution”, *Macromolecules* 45, 888–898, (2012).
- H. Yamamoto, Y. Otani, T. Seto, Pat Nartpochananom, Tawatchai Charinpanitkul, Generation of uniform tetrapod-shaped zinc oxide nanoparticles by gas phase reaction with using flow restrictor”, *Advanced Powder Technology*, 23 (1), pp. 71–79 (2012)
- M. Tsuji, T. Seto and Y. Otani, Effect of surrounding gas temperature on the morphological evolution of TiO₂ nanoparticles generated by laser ablation in tubular furnace, *J. Nanoparticle Res.*, 14, 674–683 (2012)
- T. Charinpanitkul, P. Nartpochananon, T. Satitpitakun, J. Wilcox, T. Seto, Y. Otani, Facile synthesis of tetrapodal ZnO nanoparticles by modified French process and its photoluminescence, *Journal of Industrial and Engineering Chemistry*, 18 (1), pp. 469–473 (2012)
- S. Osone, E. Manirakiza, T. Seto, Y. Otani and T. Fujimoto, Potential of Surface–Discharge Microplasma Device as Ion Source for High-Efficiency Electrical Charging of Nanoparticles, *J. Chem. Eng. Jpn.*, 45 (1), pp. 21–27 (2012)
- A. Inoue, T. Seto, Y. Otani, Onion-like carbon nanoparticles generated by multiple laser irradiations on laser-ablated particles, *Carbon*, 50, 1116–1122 (2012)
- A. A. Abdelaziz, T. Seto, M. Abdel-Salam and Y. Otani, Performance of a surface dielectric barrier discharge based reactor for destruction of naphthalene in an air stream, *J. Phys. D.*, 45, 115201 (2012)
- T. Inada, T. Koyama, F. Goto, T. Seto, “Inactivation of Ice Nucleating Activity of Silver Iodide by Antifreeze Proteins and Synthetic Polymers, *J. Phys.*

- Chem. B., 116, 5364–5371 (2012) K. Sowichai, S. Supothina, O.-U. Nimittrakoolchai, T. Seto, Y. Otani, T. Charinpanitkul, Facile method to prepare magnetic multi-walled carbon nanotubes by in situ co-precipitation route, Journal of Industrial and Engineering Chemistry, 18 (5), 1568–1571 (2012)
- K. Kozawa, T. Seto, Y. Otani, Development of a spiral-flow jet mill with improved classification performance, Advanced Powder Technology, 23 (5), 601–606 (2012)
- 小澤和三, 山本峻輔, 濑戸章文, 大谷吉生, サブミクロン粒子の乾式分散に及ぼす添加剤の影響, 化学工学論文集, 38 (5-6), 365–371 (2012)
- M. Hata, B. Linfa, Y. Otani, M. Furuuchi, Performance evaluation of an Andersen cascade impactor with an additional stage for nanoparticle sampling, Aerosol and Air Quality Research, 12 (6), 1041–1048 (2012)
- H. Ichitsubo, Y. Otani, Development of variable flow rate isokinetic sampling system for 0.5–15-m aerodynamic diameter particles, Aerosol Science and Technology, 46 (12), 1286–1294 (2012)
- M. Kumita, M. Meiwa, K. Watanabe, A. Kodama, Preparation of calcium chloride-anodized aluminum composite for water vapor sorption, Appl. Therm. Eng., Vol.50, pp.1564–1569 (2013)
- T. Seto, S. Kim, Y. Otani, A. Takami, N. Kaneyasu, T. Fujimoto, K. Okuyama, T. Takamura, S. Hatakeyama, New particle formation and growth associated with East-Asian long range transportation observed at Fukue Island, Japan in March 2012, Atmospheric Environment, 74, 29–36 (2013)
- E. Manirakiza, T. Seto, S. Osone, K. Fukumori, Y. Otani, High-Efficiency Unipolar Charger for sub-10 nm Aerosol Particles Using Surface-Discharge Microplasma with a Voltage of Sinc Function, Aerosol Science and Technology, 47 (1), pp. 60–68 (2013)
- C.-S Wang, Y. Otani, Removal of nanoparticles from gas streams by fibrous filters: A review, Industrial and Engineering Chemistry Research, 52 (1), 5–17 (2013)
- T. Seto, T. Maekawa, S. Osone, K. Kawamura, T. Yamauchi, Y. Otani, Formation of highly charged nanodroplets by condensation-electrospray device, Chemical Engineering Science, 85, 46–49 (2013)
- M. Hata, T. Zhang, L. Bao, Y. Otani, Y. Bai, M. Furuuchi, Characteristics of the nanoparticles in a road tunnel, Aerosol and Air Quality Research, 13 (2), 194–200 (2013)
- A. A. Abdelaziz, T. Seto, M. Abdel-Salam, Y. Otani, Influence of nitrogen excited species on the destruction of naphthalene in nitrogen and air using surface dielectric barrier discharge, Journal of Hazardous Materials, 246–247, pp. 26–33 (2013)
- M. Hata, T. Thongyen, L. Bao, A. Hoshino, Y. Otani, T. Ikeda, M. Furuuchi, Development of a high-volume air sampler for nanoparticles, Environmental Sciences: Processes and Impacts, 15 (2), 454–462 (2013)
- Y. Tanaka, H. Higashi, E. Manirakiza, T. Seto, Y. Otani, M. Hirasawa, Charge neutralization of aerosol carbon nanofibers, J. Chem. Eng. Japan, 47 (8), 644–650 (2014)
- S. Hatakeyama, K. Ikeda, S. Hanaoka, I. Watanabe, T. Arakaki, H. Bandow, Y. Sadanaga, S. Kato, Y. Kajii, D. Zhang, K. Okuyama, T. Ogi, T. Fujimoto, T. Seto, A. Shimizu, N. Sugimoto, A. Takami, Aerial observations of air masses transported from East Asia to the Western Pacific: Vertical structure of polluted air masses, Atmospheric Environment, 97, 456–461 (2014)
- H. Fujiwara, Y. Sadanaga, J. Urata, Y. Masui, H. Bandow, K. Ikeda, S. Hanaoka, I. Watanabe, T. Arakaki, S. Kato, Y. Kajii, D. Zhang, K. Hara, T. Fujimoto, T. Seto, K. Okuyama, T. Ogi, A. Takami, A. Shimizu, S. Hatakeyama, Aerial observation of nitrogen compounds over the East China Sea in 2009 and 2010, Atmospheric Environment, 97, 462–470 (2014)
- Y. Suwa, M. Kumita, H. Komori, A. Kodama, Y. Otani, Impregnation of calcium chloride into alumina thin film prepared by oxalic acid anodizing, J. Chem. Eng. Japan, Vol.47, pp.602–607 (2014)
- A. A. Abdelaziz, T. Seto, M. Abdel-Salam, Y. Otani, Influence of N₂/O₂ Mixtures on Decomposition of Naphthalene in Surface Dielectric Barrier Discharge based Reactor, Plasma Chemistry and Plasma Processing, 34, 1371–1385 (2014)
- 前川哲也, 徳美拓也, 東秀憲, 濑戸章文, 大谷吉生, 静電噴霧による液滴分裂とイオン放出過程における溶液濃度の影響, 化学工学論文集, 40, 5–11 (2014)
- T. Seto, A. Inoue, H. Higashi, Y. Otani, M. Kohno, M. Hirasawa, Phase Transition and Restructuring of Carbon Nanoparticles induced by Aerosol Laser Irradiation, Carbon, 70, 224–232 (2014)
- M. Hata, J. Chomane, T. Thongyen, L. Bao, S. Tekasakul, P. Tekasakul, Y. Otani, M. Furuuchi, Characteristics of nanoparticles emitted from burning of biomass fuels, Journal of Environmental Sciences (China), 26 (9), 1913–1920 (2014)
- H. Yuasa, M. Kumita, T. Honda, K. Kimura, K. Nozaki, H. Emi, Y. Otani, Breathing simulator of workers for respirator performance test, Industrial Health (in Press)
- Y. Meng, X. Liang, L. Zhang, F. Jiao, M. Kumita, T. Namioka, N. Yamada, A. Sato, Y. Ninomiya, Condensation behavior of heavy metal vapors upon flue gas cooling in oxy-fuel versus air combustion, J. Chem. Eng. Japan (accepted)

地球学コース

- N. Ikuta, A. Tanaka, A. Otsubo, N. Ogawa, H. Yamamoto, T. Mizukami, S. Arai, M. Okuno, K. Terao and Seiichi Matsugo Spectroscopic studies of *R* (+)-a-lipoic acid- cyclodextrin complexes, *Int. J. Mol. Sci.* 15, 20469-20485 (2014)
- 福山厚子, 長谷川 和久, 木下 栄一郎, 奥野正幸 臨症事例 植栽カンツバキの衰退事例 : 石川県小松市における事例報告, *樹木医学研究* 18 (1), 1-5, (2014)
- L. Chen, T. Mashimo, H. Okudera, C. Iwamoto, E. Omurzak Synthesis of WO₃ H₂O nanoparticles by pulsed plasma in liquid. *RSC Advances* 4 28673-28677 (2014).
- H. Nojiri, M. Okuno, H. Okudera, T. Mizukami, S. Arai Structural change of alkali feldspar by ball milling. *Journal of Mineralogical and Petrological Sciences* 108 267-277 (2013).
- A. Arasuna, ,M. Okuno, ,T. Mizukami ,M. Akaogi, T. Yokoyama, H. Okudera, S. Arai The role of water in coesite crystallization from silica gel. *European Journal of Mineralogy* 25 791-796 (2013).
- A. Arasuna, ,M. Okuno H. Okudera, T. Mizukami S. Arai, S. Katayama, M. Koyano, N. Ito. Structural changes of synthetic opal by heat treatment. *Physics and Chemistry of Minerals* 40 745-755 (2013)
- 福山厚子, 長谷川 和久, 木下 栄一郎, 奥野正幸 酸性雨ストレスなどから緑環境を保全:酸性水灌水がクロマツの生長へ及ぼす影響, 農業および園芸 88 (2), 225-231, 2013-02
- H. Okudera Relationships among channel topology and atomic displacements in the structures of Pb₅(PO₄)₃Cl with B = P (pyromorphite), V (vanadinite) and As (mimetite). *American Mineralogist* 98 1573-1579 (2013).
- M. He, H. Okudera, A. Simon J. Koehler, S. Jin, X. Chen. Structure of Li₄B₂O₅: High-temperature monoclinic and low-temperature orthorhombic forms. *Journal of Solid State Chemistry* 197 466-470 (2013).
- L. Chen, T. Mashimo, C. Iwamoto, H. Okudera, E. Omurzak, H.S. Ganapathy, H. Ihara, J. Zhang, Z. Zhypargul Abdullaeva, S. Takebe, A. Yoshiasa Synthesis of novel CoCx@C nanoparticles. *Nanotechnology* 24 0450602 (2013)
- Z. Abdullaeva, E. Omurzak, C. Iwamoto, H. Okudera, M. Koinuma, S. Takebe, S. Sulaimankulova, T. Mashimo High temperature stable WC (1-x)@C and TiC@C core-shell nanoparticles by pulsed plasma in liq uid. *RSC Advances* 3 513-519 (2013).
- M. Hamada and M. Akasaka Distribution of cations at two tetrahedral sites in Ca₂MgSi₂O₇-Ca₂Fe³⁺AlSiO₇ series synthetic melilite and its relation to incommensurate structure, *Physics and Chemistry of Minerals*, 40, 259-270 (2013).
- M. Miura, S. Arai, Ahmed H. Ahmed, T. Mizukami, M. Okuno Podiform chromitite classification revisited: A comparison of discordant and concordant chromitite pods from Wadi Hilti, Northern Oman ophiolite, *J. Asian Earth Sci.*, 59, 52-61 (2012)
- H. Okudera, A. Yoshiasa, K. Murai, M. Okube, T. Takeda, ,S. Kikkawa Local structure of magnetite and maghemite and chemical shift in Fe K-edge XANES. *Journal of Mineralogical and Petrological Sciences* 107 127-132 (2012).
- Arai, S. and Akizawa, N. , 2014. Precipitation and dissolution of chromite by hydrothermal solutions in the Oman ophiolite: new behavior of Cr and chromite. *American Mineralogist*, 99, 28-34.
- Akizawa, N. and Arai, S. , 2014.Petrology of mantle diopside from Wadi Fizh, northern Oman ophiolite: Cr and REE mobility by hydrothermal solution. *Island Arc*, 23, 312-323 doi:10.1111/iar.12074
- Desta, M.T., Ayalew, D., Ishiwatari, A., Arai, S. and Tamura, A. , 2014. Ferropicrite from the Lalibela area in the Ethiopian large igneous province. *Journal of Mineralogical and Petrological Sciences*, 109, 191-207.
- Fukushi, K., Sakai, H., Itono, T., Tamura, A. and Arai, S. , 2014. Desorption of intrinsic cesium from smectite: Inhibitive effects of clay particle organization on cesium desorption. *Environmental Science & Technology*, 48, 10743-10749.
- Gahlan, H., Arai, S. and Almadani, S.A., 2014. Petrogenesis of carbonated meta-ultramafic lenses from the Nioproterozoic Heinai ophiolite, South Eastern Desert, Egypt: A natural analogue to CO₂ sequestration. *Journal of African Earth Sciences*, <http://dx.doi.org/10.1016/j.jafrearsci.2014.11.002>.
- Ghosh, B., Morishita, T., Gupta, B.S., Tamura, A., Arai, S. and Bandyopadhyay, D., 2014. Moho Transition Zone in the Cretaceous Andaman ophiolite, India: a passage from the mantle to the crust. *Lithos*, 198-199, 117-128.
- Ghosh, B., Ray, J., Morishita, T., 2014. Grain-scale plastic deformation of chromite from podiform chromitite of the Naga-Manipur ophiolite belt, India: Implication to mantle dynamics. *Ore Geology Reviews*, 56, 199-208.
- González-Jiménez, J.-M., Griffin, W.L., Proenza, J.A., Gerville, F., O' Reilly, S.Y., Akbulut, M., Pearson, N.J. and Arai, S. , 2014. Chromitites in ophiolites:

- how, where, when, why?, Part II. A review and new ideas on the crystallization of chromitites. *Lithos*, 189, 140–158.
- Helmy, H.M., Abd El-Rahma, Y.M., Yoshikawa, M., Shibata, T., Arai, S., Tamura, A. and Kagami, H. , 2014. Petrology and Sm–Nd dating of the Genina Gharbia Alaskan-type complex (Egypt): Insights into deep levels of Neoproterozoic island arcs. *Lithos*, 198–199, 263–280.
- Ishizuka, O., Umino, S., Taylor, R.N. and Kanayama, K. 2014. Evidence for hydrothermal activity in the earliest stages of intraoceanic arc formation: implication for ophiolite-hosted hydrothermal activity. *Economic Geology*, 109, 2159–2177.
- Ismail, S.A., Kettanah, Y.A., Chalabi, S.N., Ahmed, A.H. and Arai, S. , 2014. Petrogenesis and PGE distribution in the Al- and Cr-rich chromitites of the Qalandier Ophiolite, northeastern Iraq: Implications for the tectonic environment of the Iraqi Zagros Suture Thrust Zone. *Lithos*, 202–203, 21–36.
- Kanayama, K., Umino, S., and Ishizuka, O., 2014. Shallow submarine volcano group in the early stage of island arc development: geology and petrology of small islands south off Hahajima main island, the Ogasawara Islands. *Journal of Asian Earth Sciences*, 85, 1 – 25, <http://dx.doi.org/10.1016/j.jseas.2014.01.012>.
- Khedr, M.Z., Arai, S., Tamura, A. and Python, M., 2014. Chemical variations of abyssal peridotites in the central Oman ophiolite: evidence of oceanic mantle heterogeneity. *Gondwana Research*, 25, 1242–1262.
- Kouketsu, Y., Mizukami, T., Mori, H., Endo, S., Aoya, M., Hara, H., Nakamura, D. and Wallis, S., 2014. A new approach to develop the Raman carbonaceous material geothermometer for low-grade metamorphism using peak width. *Island Arc*, 23, 33–50.
- Kusano, Y., Hayashi, M., Adachi, Y., Umino, S. and Miyashita, S., 2014. Evolution of volcanism and magmatism during initial arc stage: constraints on the tectonic setting of the Oman Ophiolite. In Rollinson, H.R., Searle, M.P., Abbasi, I.A., Al-Lazki, A. and Al Kindi, M.H. (eds.), *Tectonic Evolution of the Oman Mountains*. Geological Society, London, Special Publications, 392, 177–193, <http://dx.doi.org/10.1144/SP392.9>.
- Miura, M., Arai, S. and Tamura, A. , 2014. Formation of discordant chromitite as the initiation of sub-arc mantle process: Observations from northern Oman ophiolite. *Journal of Mineralogical and Petrological Sciences*, 109, 38–43.
- Mizukami, T., Yokoyama, H., Hiramatsu, Y., Arai, S., Kawahara, H., Nogaya, T. and Wallis, S.R. , 2014. Two types of antigorite serpentinite controlling heterogeneous slow-slip behaviours of slab-mantle interface. *Earth and Planetary Science Letters*, 401, 148–158.
- Moghadam, H. Shafaii, Ghorbani, G., Khedr, M. Zaki, Fazlnia, N., Chiaradia, M., Eyuboglu, Y., Santosh, M., Francisco, C. Galindo, Martinez, M. Lopez, Gourgaud, A., Arai, S. , 2014. Late Miocene K-rich volcanism in the Eslamieh Peninsula (Saray), NW Iran: Implications for geodynamic evolution of the Turkish-Iranian High Plateau. *Gondwana Research*, 26, 1028–1050.
- Moghadam, H.S., Khedr, M.Z., Chiaradia, M., Stern, R.J., Bakhshinbad, F., Arai, S. Ottley, C.J. and Tamura, S., 2014. Supra-subduction zone magmatism of the Neyriz ophiolite, Iran: constraints from geochemistry and Sr–Nd–Pb isotopes. *International Geology Review*, 56, 1395–1412.
- Muroi, R. and Arai, S. , 2014. Formation process of olivine-clinopyroxene cumulates inferred from Takashima xenoliths, Southwest Japan arc. *Journal of Mineralogical and Petrological Sciences*, 109, 79–84.
- Nagaya, T., Wallis, S. R., Kobayashi, H., Michibayashi, K., Mizukami, T., Seto, Y., Miyake, A. and Matsumoto, M., 2014. Dehydration breakdown of antigorite and the formation of B-type olivine CPO. *Earth and Planetary Science Letters*, 387, 67–76.
- Nosouhian, N., Torabi, G. and, Arai, S. , 2014. Metapicrites of the Bayazeh ophiolite (Central Iran), a trace of Paleo-Tethys subduction-related mantle metasomatism. *Neues Jahrbuch für Geologie und Paläontologie Abhandlungen*, 271, 1–19.
- Payot, B. D., Arai, S., Dick, H.J.B., Abe, N. and Ichiyama, Y. , 2014. Podiform chromitite formation in a low-Cr/high-Al system: An example from the Southwest Indian Ridge (SWIR). *Mineralogy and Petrology*, 108, 533–549.
- Pirnia, T., Arai, S., Tamura, A., Ishimaru, S. and Torabi, G. , 2014. Sr enrichment in mantle pyroxenes as a result of plagioclase alteration in lherzolite. *Lithos*, 196–197, 198–212.
- Rajabi, S., Torabi, G. and Arai, S. , 2014. Oligocene crustal xenolith-bearing alkaline basalt from Jandaq area (Central Iran): Implications for magma genesis and crustal nature. *Island Arc*, 23, 125–141.
- Shafaii Moghadam, H., Li, X.-H., Ling, X.-X., Stern, R.J., Khedr, M.Z., Chiaradia, M., Ghorbani, G., Arai, S. and Tamura, A. , 2014. Devonian to Permian evolution of the Paleo-Tethys Ocean: New evidence from U–Pb zircon dating and Sr–Nd–Pb isotopes of the Darrehanjir–Mashhad “ophiolites”, NE Iran. *Gondwana Research*, <http://dx.doi.org/10.1016/j.gr.2014.06.009>
- Shafaii Moghadam, H., Khedr, M.Z., Arai, S., Stern, R.J., Ghorbani, G., Tamura, A. and Ottley, C.J. , 2014. Arc-related harzburgite-dunite-chromitite complexes in the mantle section of the Sabzevar ophiolite, Iran: a model for formation of podiform chromitites. *Gondwana Research*, <http://dx.doi.org/10.1016/j.gr.2014.06.009>

- org/10.1016/j.gr.2013.09.007.
- Shirdashtzadeh, N., Torabi, G., Meisel, T., Arai, S. , Bokhari, S.N.H., Samadi, R. and Gazel, E. , 2014. Origin and evolution of metamorphosed mantle peridotites of Darreh Deh (Nain Ophiolite, Central Iran): Implications for the Eastern Neo-Tethys evolution. *Neues Jahrbuch für Geologie und Paläontologie Abhandlungen*, 273, 89–120.
- Takeuchi, M. and Arai, S. , 2014. Lower crustal metasomatism inferred from mafic xenoliths from Ichinomegata crater, Northeast Japan arc. *Journal of Mineralogical and Petrological Sciences*, 109, 85–90.
- Tamura, A., Morishita, T., Ishimaru, S. and Arai, S. , 2014. Geochemistry of spinel-hosted amphibole inclusions in abyssal peridotite: insight into secondary melt formation in melt-peridotite reaction. *Contributions to Mineralogy and Petrology*, 167, 974, DOI 10.1007/s00410-014-0974-x.
- Torabi, Ghodrat, Arai, Shoji and Abbasi, Hamideh , 2014. Eocene continental dyke swarm from central Iran (Khur area). *Petrology*, 22, 617–632.
- Woo, Y., Yang, K., Kil, Y., Yun, S.-H. and Arai, S. , 2014. Silica- and LREE-enriched spinel peridotite xenoliths from the Quaternary intraplate alkali basalt, Jeju Island, South Korea: Old subarc fragments? *Lithos*, 208–209, 312–323.
- Abbou-Kebir, K., Arai, S., Ahmed, A.H. and Ceuleneer, G., 2013. Spinel-free and spinel-poor dunite veins crosscutting the Wadi Rajmi ophiolite chromitite (northern Oman ophiolite). *Bulletin de la Société Géologique de France* 184, 259–264.
- Ali, M. and Arai, S., 2013. Cr-rich magnesiokatophorite as an indicator of mantle metasomatism by hydrous Na-rich carbonatite. *Journal of Mineralogical and Petrological Sciences*, 108, 215–226.
- Arai, S. , 2013. Conversion of low-pressure chromitites to ultrahigh-pressure chromitites by deep recycling: A good inference. *Earth and Planetary Science Letters*, 379, 81–87.
- Arasuna, A., Okuno, M., Mizukami, T., Arai, S., Katayama, S., Koyano, M. and Ito, N., 2013. The role of water in coesite crystallization from silica gel. *European Journal of Mineralogy*, 25, 791–796. DOI: 10.1127/0935-1221/2013/0025-2331
- Arasuna, A., Okuno, M., Okudera, H., Mizukami, T., Arai, S., Katayama, S., Koyano, M. and Ito, N. , 2013. Structural changes of synthetic opal by heat treatment. *Physics and Chemistry of Minerals*, 40, 747–755.
- Aoya, M., Endo, S., Mizukami, T. and Wallis, S. R., 2013. Paleo-mantle wedge preserved in the Sambagawa high-pressure metamorphic belt and the thickness of forearc continental crust. *Geology*, 41, 451–454.
- Erdenesaihan, G., Ishiwatari, A., Orolmaa, D., Arai S. and Tamura, A. , 2013. Middle Paleozoic greenstones of the Hangay region, central Mongolia: Remnants of an accreted oceanic plateau and forearc magmatism. *Journal of Mineralogical and Petrological Sciences*, 108, 305–325.
- Fukushi, K., Hasegawa, Y., Maeda, K., Aoi, Y., Tamura, A., Arai, S., Yamamoto, Y., Aosai, D. and Mizuno, T. , 2013. Sorption of Eu (III) on granite: EPMA, La-ICP-MS, batch and modeling studies. *Environmental Science & Technology*, 47, 12811–12818.
- Ghosh, B., Morishita, T., Bhatta, K., 2013. Significance of chromian spinels from the mantle sequence of the Andaman Ophiolite, India: Paleogeodynamic implications. *Lithos*, 164–167
- Giovanardi, T., Morishita, T., Zanetti, A., Mazzucchelli, M., Vannucci, R., 2013. Igneous sapphirine as a product of melt-peridotite interactions in the Finero Phlogopite-Peridotite Massif, Western Italian Alps. *European Journal of Mineralogy*, 25, 17–31.
- Harigane, Y., Michibayashi, K., Morishita, T., Tani, K., Dick, H.J.B., Ishizuka, O., 2013. The earliest mantle fabrics formed during subduction zone infancy. *Earth and Planetary Science Letters*, 377–378, 106–113.
- Hirano, N., Machida, S., Abe, N., Morishita, T., Tamura, A., Arai, S. (2013) Petit-spot lava fields off the central Chile trench induced by plate flexure. *Geochemical Journal*, 47, 235–247.
- Hasebe, N., Tamura, A. and Arai, S. , 2013. Zeta equivalent fission-track dating using LA-ICP-MS and examples with simultaneous U-Pb dating. *Island Arc*, 22, 280–291.
- Ichiyama, Y., Morishita, T., Tamura, A. and Arai, S., 2013. Petrology of peridotite xenolith-bearing basaltic to andesitic lavas from the Shiribeshi Seamount, off northwestern Hokkaido, Japan Sea: Mixing of near-primary basaltic and crustal felsic magmas in a rear-arc volcano. *Journal of Asian Earth Sciences*, 76, 48–58.
- Ito, H., Tamura, A., Morishita, T., Arai, S., Arai, F. and Kato, O. , 2013. Quaternary plutonic magma activities in the southern Hachimantai geothermal area (Japan) inferred from zircon LA-ICP-MS U-Th-Pb dating method. *Journal of Volcanology and Geothermal Research*, 265, 1–8.
- Ito, H., Yamada, R., Tamura, A., Arai, S., Horie, K. and Hokada, T., 2013. Earth's youngest exposed granite and its tectonic implications: the 10–0.8 Ma Kurobegawa Granite. *Nature, Scientific Reports*, 3:1306, DOI:10.1038/srep01306.
- Khedr, M.Z. and Arai, S. , 2013. Origin of Neoproterozoic ophiolitic peridotites in south Eastern Desert, Egypt, constrained from primary mantle mineral chemistry. *Mineralogy and Petrology*, 107, 807–828.
- Khedr, M.Z., Arai, S. and Python, M., 2013. Petrology

- and chemistry of basal lherzolites above the metamorphic sole from Wadi Sarami, central Oman ophiolite. *Journal of Mineralogical and Petrological Sciences*, 108, 13–24.
- 森下知晃, 2013. オフィオライトから推定するかんらん岩の島弧成熟過程. *岩石鉱物科学*, 42, 258–275.
- Negishi, H., Arai, S., Yurimoto, H., Ito, S., Ishimaru, S., Tamura, A and Akizawa, N., 2013. Sulfide-rich dunite within a thick Moho transition zone of the northern Oman ophiolite: implications for the origin of Cyprus-type sulfide deposits. *Lithos*, 164–167, 22–35.
- Nojiri, H., Okuno, M., Okudera, H., Mizukami, T. and Arai, S., 2013. Structural change of alkali feldspar by ball milling. *Journal of Mineralogical and Petrological Sciences*, 108, 267–277.
- Payot, B.D., Arai, S., Tamayo, R.A., Jr. and Yumul, G.P., Jr., 2013. Textural evidence for the chromite-oversaturated character of the melt involved in podiform chromitite formation. *Resource Geology*, 63, 313–319.
- Pirnia T., Arai, S. and Torabi, G., 2013. A better picture of the mantle section of the Nain ophiolite inferred from detrital chromian spinel. *Journal of Geology*, 121, 645–661.
- Rajesh, V.J., Arai, S., Satish-Kumar, M., Santosh, M. and Tamura, A., 2013. High-Mg low-Ni olivine cumulates from a Pan-African accretionary belt in southern India: Implications for the genesis of volatile-rich high-Mg melts in suprasubduction setting. *Precambrian Research*, 227, 409–425.
- 田村明弘・森下知晃・荒井章司, 2013. 海洋コアコンプレックスから得られたかんらん岩の重要性:中央海嶺下マントル物質の不均質性とメルトの存在. *岩石鉱物科学*, 42, 221–231.
- Terada, T., Hiramatsu, Y. and Mizukami, T., 2013. Shear wave anisotropy beneath the volcanic front in south Kyushu area, Japan: Development of C-type olivine CPO under H₂O-rich conditions. *Journal of Geophysical Research*, 118, 4253–4264.
- Torabi, G. and Arai, S., 2013. Back-arc Paleo-Tethys related blueschist from Central Iran, South of Chuppanan, Isfahan Province. *Petrology*, 21, 393–407.
- Abd El-Rahman, Y., Helmy, H.M., Shibata, T., Yoshikawa, M., Arai, S. and Tamura, A., 2012. Mineral chemistry of the Neoproterozoic Alaskan-type Akarem Intrusion with special emphasis on amphibole: Implications for the pluton origin and evolution of subduction-related magma. *Lithos*, 155, 410–425.
- Ahmed, A.H., Gharib, M.E. and Arai, S., 2012. Characterization of the thermally metamorphosed mantle-crust transition zone of the Neoproterozoic ophiolite at Gebel Mudarraj, South Eastern Desert, Egypt. *Lithos* 142/143, 67–83.
- Akizawa, N., Arai, S. and Tamura, A., 2012. Behavior of MORB magmas at uppermost mantle beneath a fast-spreading axis: an example from Wadi Fizh of the northern Oman ophiolite. *Contributions to Mineralogy and Petrology*, 164, 601–625.
- Arai, S., Ishimaru, S. and Mizukami, T., 2012. Methane and propane micro-inclusions in olivine in titanoclinohumite-bearing dunites from the Sanbagawa high-P metamorphic belt, Japan: hydrocarbon activity in a subduction zone and Ti mobility. *Earth and Planetary Science Letters*, 353–354, 1–11.
- 荒井章司, 2012. ポディフォーム・クロミタイトはマントル内を循環するか? : 超高圧クロミタイトの謎. (Podiform chromitites possibly recycled within the mantle) *岩石鉱物科学 (Japanese Magazine of Mineralogical and Petrological Sciences)*, 41, 247–256.
- 浅田美穂・富士原敏也・海野 進, 2012. 中部マリアナトラフ拡大軸における火山活動位置についての考察—深海曳航式サイドスキャンソナーと「しんかい6500」による高解像度観察の記録から. *火山*, 57, 1–18.
- Borisova, A., Ceuleneer, G., Kamenetsky, V., Arai, S., Béjina, F., Bindeman, I., Polv , M., de Parseval, P., Aigouy, T. and Pokrovski, G., 2012. A new view on the petrogenesis of the Oman ophiolite chromitites from microanalyses of chromite-hosted inclusions. *Journal of Petrology*, 53, 2411–2440.
- Gahlan, H.A., Arai, S., Abu El-Ela, F.F. and Tamura, A., 2012. Origin of wehrlite cumulates in the Moho Transition Zone of the Neoproterozoic Ras Salatit Ophiolite, Central Eastern Desert, Egypt. *Contributions to Mineralogy and Petrology*, 163, 225–241.
- Ghosh, B., Morishita, T., Bhatta, K., 2012. Detrital chromian spinels from beach placers of Andaman Islands, India: A perspective view of petrological characteristics and variations of the Andaman Ophiolite. *Island Arc*, 21, 188–201.
- Ishimaru, S. and Arai, S., 2012. Possibility of titanium transportation within a mantle wedge: formation process of titanoclinohumite in Fujiwara dunite in Sanbagawa belt, Japan. *Solid Earth Discuss.*, 4, 230–239. www.solid-earth-discuss.net/4/203/2012/ doi:10.5194/se-4-203-2012.
- 伊藤久敏, 田村明弘, 森下知晃, 荒井章司, 2012. 飛騨山脈の深成岩マグマの貫入時期とテクトニクス-LA-ICP-MSによるジルコンのU-Pb年代測定法の適用 – (Timing of some plutonic intrusions and tectonics in the Hida Mountain Range: An application of LA-ICP-MS U-Pb dating on zircons). *地質学雑誌 (Journal of the Geological Society of Japan)*, 118, 449–456.
- Kanayama, K., Umino, S., and Ishizuka, O., 2012. Eocene volcanism during the incipient stage of Izu-Ogasawara Arc: Geology and petrology of the Mukojima Island Group, the Ogasawara Islands. *Island Arc*, 21, 288 – 316, DOI: 10.1111/iar.12000.

- Khedr, M.Z. and Arai, S., 2012. Petrology and geochemistry of prograde deserpentinized peridotites from Happo-O' ne, Japan: evidence of element mobility during deserpentinization. *Journal of Asian Earth Sciences*, 43, 150–163.
- Kobayashi, T., Yamamoto, J., Hirajima, T., Ishibashi, H., Hirano, N., Kai, Y., Prikhod'ko, V.S. and Arai, S., 2012. Conformity and precision of CO₂ densimetry in CO₂ inclusions: microthermometry versus Raman microspectroscopic densimetry. *Journal of Raman Spectroscopy*, 43, 1126–1133.
- Kusano, Y., Adachi, Y., Miyashita, S. and Umino, S., 2012. Lava accretion system around mid-ocean ridges: Volcanic stratigraphy in the Wadi Fizh area, northern Oman ophiolite. *Geochem. Geophys. Geosyst.*, 13, Q05012, doi:10.1029/2011GC004006.
- Miura, M., Arai, S., Ahmed, A.H., Mizukami, M., Okuno, M. and Yamamoto, S., 2012. Podiform chromitite classification revisited: a comparison of discordant and concordant chromitite pods from Wadi Hilti, northern Oman ophiolite. *Journal of Asian Earth Sciences* 59, 52–61.
- Spengler, D., Obata, M., Hirajima, T., Ottolini, L., Ohfuri, H., Tamura, A. and Arai, S., 2012. Exsolution of garnet and clinopyroxene from high-Al pyroxenes in Xugou peridotite, E China. *Journal of Petrology*, 53, 1477–1504.
- Sueoka, S., Kohn, B.P., Tagami, T., Tsutsumi, H., Hasebe, N., Tamura, A. and Arai, S., 2012. Denudation history of the Kiso Range, central Japan, and its tectonic implications: Constraints from low-temperature thermochronology. *Island Arc*, 21, 32–52.
- Tiepolo, M., Langone, A., Morishita, T., Yuhara, M., 2012. On the Recycling of Amphibole-rich Ultramafic Intrusive Rocks in the Arc Crust: Evidence from Shikanoshima Island (Kyushu, Japan). *Journal of Petrology*, 53, 1255–1285.
- Umino, S., 2012. Emplacement mechanism of off-axis large submarine lava field from the Oman Ophiolite. *J. Geophys. Res.*, 117, B11210, doi:10.1029/2012JB009198.
- Yamamoto, J., Nishimura, K., Ishibashi, H., Kagi, H., Arai, S. and Prikhod'ko, V.S., 2012. Thermal structure beneath Far Eastern Russia inferred from geothermobarometric analyses of mantle xenoliths: direct evidence for high geothermal gradient in backarc lithosphere. *Tectonophysics*, 554–557, 74–82.
- Yang, K., Szabó, Cs. and Arai, S., 2012. Silica enrichment on Group II xenoliths by evolved alkali basalt from Jeju Island, South Korea: implication for modification of intraplate deep-seated rocks. *Mineralogy and Petrology*, 106, 107–130.
- Yang, K., Arai, S., Yu, J-E., Yun, S-H. and Hwang, J-Y., 2012. Gabbroic xenoliths and megacrysts in Pleisto-Holocene alkali basalts from Jeju Island, South Korea: implications for metasomatism of the lower continental crust. *Lithos* 142/143, 201–215.
- Amano, K., Jenkins, R.G., Nishida, K. A new Paleocene species of *Bentharca* (*Bivalvia*; *Arcidae*) from eastern Hokkaido, with remarks on evolutionary adaptation of suspension feeders to deep sea. *Paleontological Research* (in press)
- Insafitri and T. Kamiya, 2014. Habitat segregations and adaptive morphology of ostracodes in intertidal zones in Indonesia. *Ecology, Environment and Conservation*, 2014 (4) (in press).
- Smith, R. J., R. Matzke-Karazs, T. Kamiya and P. De Deckker. Sperm lengths of non-marine cypridoidian ostracods (Crustacea). *Acta Zoologica*. Doi: 10.1111/azo.12099 (in press).
- Kaim, A., Jenkins, R.G., Tanabe, K., and Kiel, S. 2014. Mollusks from late Mesozoic seep deposits, chiefly in California. *Zootaxa* 3861: 401–440.
- Amano, K., Jenkins, R.G., 2014. A Paleocene aporrhaid gastropod 1 from eastern Hokkaido, northern Japan. *Paleontological Research*, 18 (1), 33–39.
- Amano, K., Jenkins R. G., Ohara, M., Kiel, S., 2014. Miocene vesicomyid species (*Bivalvia*) from Wakayama in southern Honshu, Japan. *The Nautilus*. 128 (1), 9–17.
- Kaim A., Skupien P., Jenkins, R.G., 2014. A new Lower Cretaceous hydrocarbon seep locality from the Czech Carpathians and its fauna. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 390, 42–51.
- Li, G., Ando, H., Hasegawa, H., Yamamoto, M., Hasegawa, T., Ohta, T., Hasebe, N. & Ichinnorov, N., Confirmation of a Middle Jurassic age for the Eedemt Formation in Dundgobi Province, south-east Mongolia: constraints from the discovery of new spinicaudatans (clam shrimps). *Alcheringa*, 2014. vol. 38, DOI:10.1080/03115518.2014.870834.
- 宇佐見 和子・池原 研・ロバート ジェンキンズ・芦寿一郎, 2014. 底生有孔虫群集に基づくイベント堆積物の粒子供給源の推定：2011年東北地方太平洋沖地震とそれに伴う津波による堆積物の例. 堆積学研究, 73 (1), 37–43.
- 宇都宮正志, 長浜千展, 野崎 篤, ジェンキンズ ロバート, 間嶋隆一. 2014. シロウリガイ類化石を含む貝殻集積砂岩層（下部更新統上総層群野島層）. 地質学雑誌, 120 (7), 221–230.
- Smith, R. J. and T. Kamiya, 2014. The freshwater ostracod (Crustacea) genus *Notodromas* Lilljeborg, 1853 (*Notodromadidae*) from Japan; taxonomy, ecology and lifestyle. *Zootaxa*, 3841 (2), 239–256.
- Kitahashi T., Jenkins, R. G., Nomaki, H., Shimanaga, M., Fujikura K., Kojima, S., 2014. Effect of the 2011 Tohoku Earthquake on deep-sea meiofaunal assemblages inhabiting the landward slope of the Japan Trench. *Marine Geology*, 358, 128–137.
- Ikeharaa, K., Irino, T., Usami, K., Jenkins R.G., Omura, T., 2014. Effect of the 2011 Tohoku Earthquake on deep-sea meiofaunal assemblages inhabiting the landward slope of the Japan Trench. *Marine Geology*, 358, 128–137.

- rad, A., Ashi, J., 2014. Possible submarine tsunami deposits on the outer shelf of Sendai Bay, Japan resulting from the 2011 earthquake and tsunami off the Pacific coast of Tohoku. *Marine Geology*, 358, 120–127.
- Amano, K., Jenkins, R.G., Sako, Y., Ohara, M., Kiel, S. (2013) A Paleogene deep-sea methane-seep community from Honshu, Japan. *Palaeogeography, Palaeoclimatology, Palaeoecology*, 387, 126–133.
- Amano, K., Jenkins, R.G., 2013. A new Provanna (Gastropoda: Provannidae) from the Oligocene Nuibetsu Formation in eastern Hokkaido, Japan. *Paleontological Research*, 17 (4), 325–329.
- Hasegawa, T., Crampton, J., Schiøler, P., Field, B., Fukushi, and K. Kakizaki, Y., 2013. Carbon isotope stratigraphy and depositional oxia through Cenomanian/Turonian boundary sequences (Upper Cretaceous) in New Zealand. *Cretaceous Research*, vol. 40, 61–80.
- Jenkins, R.G., Kaim, A., Little, C.T.S., Campbell, K., Iba, Y., Tanabe, K. (2013), Worldwide distribution of modiomorphid bivalve genus Caspiconcha in late Mesozoic hydrocarbon seeps: *Acta Palaeontologica Polonica*, 58, 357–382.
- Kakizaki, Y., Weissert, H. J., Hasegawa, T., Ishikawa, T., Matsuoka, J. and Kano, A., 2013. Strontium and carbon isotope stratigraphy of the Late Jurassic shallow marine limestone in western Palaeo-Pacific, northwest Borneo. *Journal of Asian Earth Sciences*, vol. 73, 57–67.
- Ozawa, H. and T. Kamiya, 2013. A New Species of Sagmatocythere (Crustacea: Ostracoda: Loxoconchidae) from the Pleistocene Kawachi Formation in Central Japan. *Bulletin of the National Museum of Nature and Science, Series C (Geology & Paleontology)*, 39, 7–15.
- Escriva, A., R. J. Smith, J. A. Aguilar-Alberola, T. Kamiya, I. Karanovic, J. Rueda, E. I. Schornikov and F. Mesquita-Joanes, 2012. Global distributions of Fabaeformiscandona subacuta; An exotic invasive ostracoda on the Iberian Peninsula? *Journal of Crustacean Biology*, 32 (6), 949–961.
- 後藤（桜井）晶子, 沖野 遼, 長谷川 卓, 2012. ガスベンチ/安定同位体比質量分析計を用いた連続フローシステムによる炭酸塩の炭素, 酸素安定同位体比測定 – 条件設定に向けての検討一. 福井県立恐竜博物館紀要, vol. 11, 49–55.
- Kakizaki, Y., Ishikawa, T., Nagaishi, K., Tanimizu, M., Hasegawa, T. and Kano, A., 2012. Strontium isotopic ages of the Torinosu-type limestones (latest Jurassic to earliest Cretaceous, Japan): implication for biocalcification event in northwestern Palaeo-Pacific. *Journal of Asian Earth Sciences*, vol. 46, 140–149.
- Moriya, K., Goto, A. and Hasegawa, T., 2012. Stable carbon and oxygen isotope analyses of carbonate using a continuous flow isotope ratio mass spectrometry. *Science Report of Kanazawa University*, vol. 56, pp. 45–58.
- Tsukasaki, S., H. Domitsu, Y. Fukaya, M. Furuichi, K. Koamada, T. Kamiya, M. Kumakiri, T. Murase, T. Sakano, T. Seikai and Y. Takahashi, 2012. Preliminary Results from Sediment Sampling of the R. V. *Tansei-maru* Cruise KT05-9 in the Central and Southwestern Parts of the Japan Sea, the Yamato Bank, off Wakasa Bay and off Kurobe River, Central Japan, *Bulletin of the Japan Sea Research Institute, Kanazawa University*, No. 43, 87–96.
- Yamaguchi, T., H. Mashiba and T. Kamiya, 2012. Miocene ostracodes from the Osaki Formation, Kukinaga Group, Tanegashima, southern Japan and their significance for the Indo-West Pacific biogeography. *Paleontological Research*, 16 (2), 107–123.
- 服部貴志, 浜田昌明, 高山陶子, 小野田 敏, 坂下 学, 山口弘幸, 平松良浩, 古砂丘・古期扇状地に関する空中写真を活用したDEM解析による地形特性の検討, 地形, Vol. 35, No.4, pp. 331–350, (2014.10).
- Tsuji, S., Hiramatsu, Y., the Japanese University Group of the Joint Seismic Observations at the Area of Nobi Earthquake, Spatial variation in coda Q around the Nobi fault zone, central Japan: relation to S-wave velocity and seismicity, *Earth Planets Space*, 66:97, doi:10.1186/1880-5981-66-97, (2014.8).
- Shimizu, H., Hiramatsu, Y., Kawasaki, I., Search for latitudinal variation of spectral peak frequencies of low-frequency eigenmodes excited by great earthquakes, *Polar Science*, <http://dx.doi.org/10.1016/j.polar.2014.07.002>, (2014.7).
- Mizukami, T., Yokoyama, H., Hiramatsu, Y., Arai, S., Kawahara, H., Nagaya, T., Wallis, S.R., Two types of antigorite serpentinite controlling heterogeneous slow-slip behaviours of slab-mantle interface, *Earth Planet. Sci. Lett.*, Vol. 401, pp. 148–158, (2014.6).
- Yasuda, N., Sumita, I., Shaking conditions required for flame structure formation in a water-immersed granular medium, *Progress Earth Planet Sci*, 1:13 doi:10.1186/2197-4284-1-13, Springer Open (2014.6).
- Namiki, A., Yamaguchi, T., Sumita, I., Suzuki, T., Ide, S., Earthquake model experiments in a viscoelastic fluid: A scaling of decreasing magnitudes of earthquakes with depth, *J. Geophys. Res.* DOI:10.1002/2014JB011135, (2014.4).
- Ishihara, Y., Saruwatari, Y., Sawada, A., Morota, T., Hiramatsu, Y., Quantitative measurement method for impact basin characteristics based on localized spherical harmonics, *Icarus*, Vol. 228, pp. 315–323, (2014.1).
- Hayashi, M., Hiramatsu, Y., Spatial distribution of

- similar aftershocks of a large inland earthquake, the 2000 Western Tottori earthquake, in Japan, *Earth Planets Space*, Vol. 65, pp. 1587–1592, (2013.12).
- Ishida, R., Hiramatsu, Y., Matsuzawa, T., Obara, K., Average slip rate at the transition zone on the plate interface beneath the Kii Peninsula, Japan, estimated from deep low-frequency tremors, *Earth Planets Space*, Vol. 65, 1047–1051, (2013.10).
- Terada, T., Hiramatsu, Y., Mizukami, T., Shear wave anisotropy beneath the volcanic front in south Kyushu area, Japan: Development of C-type olivine CPO under H₂O-rich conditions, *J. Geophys. Res.*, Vol. 118, pp. 4253–4264, doi:10.1002/jgrb.50300, (2013.8).
- Takita, H. and Sumita, I., Low-velocity impact cratering experiments in a wet sand target, *Phys. Rev. E*, Vol. 88, 022203 (2013.8).
- Shibano, Y., Sumita, I., Namiki, A., A laboratory model for melting erosion of a magma chamber roof and the generation of a rhythmic layering, *J. Geophys. Res.*, Vol. 118, pp. 4101–4116, DOI:10.1002/jgrb.50295, (2013.8).
- Hiramatsu, Y., Sawada, A., Yamauchi, Y., Ueyama, S., Nishigami, K., Kurashimo, E., the Japanese University Group of the Joint Seismic Observations at NKTZ, Spatial variation in coda Q and stressing rate around the Atotsugawa fault zone in a high strain rate zone, central Japan, *Earth Planets Space*, Vol. 65, pp. 115–119, (2013.3).
- Endo, N., Murakami, T., Izumi, N., Measurements Concerning Generation of Rhomboid Rills in Flume Experiments: Froude Number and Sand-Topographic Feature. *Journal of the Physical Society of Japan*, 82 033401, (2013.3).
- Shibano, Y., Namiki, A., Sumita, I., Experiments on upward migration of a liquid-rich layer in a granular medium: Implications for a crystalline magma chamber, *Geochem. Geophys. Geosys.*, Q03007, doi:10.1029/2011GC003994, (2012.3).
- 本多亮, 澤田明宏, 古瀬慶博, 工藤健, 田中俊行, 平松良浩, 金沢大学重力データベースの公表, *測地学会誌*, Vol. 58, No. 4, pp. 153–160, (2013.2).
- 平松良浩, 小阪大, 石川県部入道遺跡の噴砂痕の形成年代:森本・富樫断層帯の活動との関連, 地震第2輯, Vol. 65, No. 3, 251–254, (2013.1).
- Taniguchi, K., Endo, N., Sekiguchi, H., The effect of periodic changes in wind direction on the deformation and morphology of isolated sand dunes based on flume experiments and field data from the Western Sahara. *Geomorphology*, 179, 286–299, (2012.12).
- Hasebe, N., Inagaki, A., Endo, N., Fukushi, K., Ito, K., Kashiwaya, K., Thermoluminescence color image analysis of sediments from Lake Khuvsgul, Mongolia, and its potential to investigate paleoenvironmental change. *Quaternary Geochronology*, 10, 156–159, (2012.10).
- Sawada, A., Bessyo, H., Hiramatsu, Y., Kono, Y., Furumoto, M., Gravity Anomaly and Subsurface Structure in the Kaga Hot Springs Area, *J. Balneol. Soc. Jpn.*, Vol. 62, pp. 135–143, (2012.9).
- Ishihara, Y., Hiramatsu, Y., Yamamoto, M.-Y., Furumoto, M., Fujita, K., Infrasound/Seismic Observation of the Hayabusa Reentry: Observations and Preliminary Results, *Earth Planets Space*, Vol. 64, pp. 655–660, (2012.8).
- 澤田明宏, 平松良浩, 水林侑, 浜田昌明, 本多亮, 重力異常から見た能登半島北部地域の地塊構造, 地震第2輯, Vol. 64, No. 4, pp. 235–239, (2012.6).
- Krivonogov, S., Yi, S., Kashiwaya, K., Kim, J.C., Narantsetseg T., Oyunchimeg T., Safonova, I., Kazansky, A., Sitnikova, T., Kim, J.Y., Hasebe, N., Solved and unsolved problems of sedimentation, glaciation and paleolakes of the Darhad Basin, Northern Mongolia, *Quaternary Science Reviews*, 56, 142–163, 2012
- Kashiwaya, K., Earth surface processes and environmental changes in lake-catchment systems, *Transactions, Japanese Geomorphological Union*, 33, 121–136, 2012
- Ochiai, S., Lin, J. C., Kashiwaya, K., Jen, C.H., Influence of Construction of Dams and Waterway Tunnels on Sedimentation Rate and Bottom Topography in Sun Moon Lake, Taiwan, *TJGU*, 33, 149–170, 2012
- Noriko Hasebe, Ayako Inagaki, Noritaka Endo, Keisuke Fukushi, Kazumi Ito and Kenji Kashiwaya, Thermoluminescence color image analysis of sediments from Lake Khuvsgul, Mongolia, and its potential to investigate paleoenvironmental change, *Quaternary Geochronology*, 10, 156–159 2012
- Kashiwaya K., Ochiai S., Okimura T., Nahm W.H., Yang D.Y., Kim J.Y., Erosion and sedimentation in lake-catchment systems in Japan and Korea on the basis of an elementary process model, *Transactions, Japanese Geomorphological Union*, 33, 219–236, 2012
- Itono, T., Kashiwaya, K., Sakaguchi, A., Disastrous flood events found in lacustrine sediments from Lake Biwa: *Transactions, Japanese Geomorphological Union*, 33-4, 453–468, 2012
- 河原幸平・長谷部徳子・田村明弘, 金沢大LA-ICP-MSによる同位体比測定の設定・計算法依存性評価, フィッショントラックニュースレター, 25, 25–27, 2012
- 大石新之介・長谷部徳子・福間剛士, 短時間エッチングジルコンの原子間力顕微鏡(AFM)による高解像度観察, フィッショントラックニュースレター, 25, 43–45, 2012
- Shigeru Sueoka, Barry P. Kohn, Takahiro Tagami, Hiroyuki Tsutsumi, Noriko Hasebe, Akihiro Tamura and Shoji Arai, Denudation history of the Kiso

- Range, central Japan, and its tectonic implications: Constraints from low-temperature thermochronology, *Island Arc*, 21, 32–5, 2012
- Shinnosuke Ohishi and Noriko Hasebe, Observations of Fission-tracks in Zircons by Atomic Force Microscope, *Radiation Measurements*, 48, 554–556, 2012
- Sergey Krivonogov, Sangheon Yi, Kenji Kashiwaya, Jincheul Kim, Narantsetseg T, Oyunchimeg T, Inna Safonova, Alexey Kazansky, Tatiana Sitanikova, Juyong Kim, Noriko Hasebe, Solved and unsolved problems of sedimentation, glaciation and paleolakes of the Darhad Basin, Northern Mongolia, *Quaternary Science Reviews*, 56, 142–163, 2012
- Quennehen, B., Schwarzenboeck, A., Matsuki, A., Burkhardt, J. F., Stohl, A., Ancellet, G., Law, K. S., Anthropogenic and forest fire pollution aerosol transported to the Arctic: observations from the POLARCAT-France spring campaign, *Atmospheric Chemistry and Physics*, 12, 6437–6454, 2012.
- Fukuma, T., Onishi, K., Kobayashi, N., Matsuki, A., Asakawa, H., Atomic-resolution imaging in liquid by frequency modulation atomic force microscopy using small cantilevers with megahertz-order resonance frequencies, *Nanotechnology*, 23, 135706, 2012.
- Kamei, A. Fukushi, K. Takagi, T. and Tsukamoto, H. Chemical overprinting of magmatism by weathering: A practical method for evaluating the degree of chemical weathering granitoids. *Applied Geochemistry*, 27, 796–805, 2012
- Kanematsu M, Young T, Fukushi K, Green P, and Darby J Individual and combined effects of water quality and empty bed contact time on As (V) removal by a fixed-bed iron oxide adsorber: Implication for silicate precoating. *Water Research*, 46, 5061–5070, 2012
- Yagi, S. and Fukushi, K. Removal of phosphate from solution by adsorption and precipitation of calcium phosphate onto monohydrocalcite. *Journal of Colloid and Interface Science*, 384, 128–136, 2012
- 間中光雄・福士圭介・宮下由香里・伊藤順一・渡部芳夫・小林健太・亀井淳志 2000年鳥取県西部地震の余震域と非余震域に分布する断層ガウジの比較 地質学雑誌, 118, 459–475, 2012
- 西山理沙・宗本隆志・福士圭介アルカリ環境で生成するCa-CO₃-Mg系準安定相とその地球化学的意義, 月刊地球, 34, 168–172, 2012
- Orkhonselenge, A., Krivonogov,S., Mino, K., Kashiwaya, K., Safonova,I. Y., Yamamoto, M., Kashima, K., Nakamura, T., Kim, J.Y., Holocene sedimentary records from Lake Borsog, eastern shore of Lake Khuvsgul, Mongolia, and their paleoenvironmental implications, *Quaternary International*, 290–291, 95–109, 2013
- Ochiai S., Nagao S., Yamamoto M., Itono T., Kashiwaya K., Fukui K., Iida H., Deposition records in lake sediments in western Japan of radioactive Cs from the Fukushima Dai-ichi nuclear power plant accident, *Applied Radiation and Isotopes*, 81, 366–370, 2013
- Ochiai, S., Yamamoto, M., Nagao, S., Itono, T., Kashiwaya, K., Sediment transport processes in a reservoir–catchment system inferred from sediment trap observations and fallout radionuclides: *Journal of Radioanalytical and Nuclear Chemistry*, APSORC2013 proceedings
- 高岡美咲・長谷部徳子・石川尚人・岩田尚能・田村明弘・荒井章司, 南極・昭和基地周辺の岩石のアパタイトフイッショントラック年代測定, フィッション・トラック ニュースレター, 26, 34–36 2013
- 中野靖幸・長谷部徳子・宮本光・東野外志男・田村明弘・荒井章司, 白山火山のマルチ年代測定, フィッション・トラック ニュースレター, 26, 32–33 2013
- 伊藤一充・Geoff Duller・長谷部徳子・荒井章司・中村俊夫・柏谷健二, モンゴル・フブスグル湖コア堆積物のルミネッセンス年代決定, フィッション・トラック ニュースレター, 26, 26–28 2013
- 伊藤一充, 長谷部徳子, 柏谷健二, 湖沼堆積物のルミネッセンス年代測定とその問題点, 「号外地球」第四紀研究における高精度年代測定法の新展開: 最近10年間の進展, 62, 37–43, 2013
- 長谷部徳子, 伊藤健太郎, 福間剛士, 大石新之介, 金周龍, フィッショントラック年代測定における多様化する観察法, 号外地球」第四紀研究における高精度年代測定法の新展開: 最近10年間の進展, 62, 124–128, 2013
- Hideki Iwano, Yuji Orihashi, Takafumi Hirata, Masa-sugu Ogasawara, Tohru Danhara, Kenji Horie, Noriko Hasebe, Shigeru Sueoka, Akihiro Tamura, Yasutaka Hayasaka, Aya Katsume, Hisatoshi Ito, Kenichiro Tani, Jun' Ichi Kimura, Qing Chang, Yoshikazu Kouchi, Yasuhiro Haruta, and Koshi Yamamoto, An inter-Laboratory Evaluation of OD-3 Zircon for Use as a Secondary U-Pb Dating Standard, *Island Arc*, 22, 382–394, 2013
- Noriko Hasebe, Akihiro Tamura, Shoji Arai, Zeta equivalent fission-track dating using LA-ICP-MS and examples with simultaneous U-Pb dating, *Island Arc*, 22, 280–291, 2013
- Matsuki, A., Application of Micro Raman spectroscopy on atmospheric aerosol research, *Eiarozoru Kenkyu*, 28 (3), 208–213, 2013.
- Maki, T., Kakikawa, M., Kobayashi, F., Yamada, M., Matsuki, A., Hasegawa, H., Iwasaka, Y., Assessment of composition and origin of airborne bacteria in the free troposphere over Japan, *Atmospheric Environment*, 74, 73–82, 2013.
- Hasegawa, T., Crampton, J., Schioler, P., Field, B., Fukushi, K. and Kakizaki, Y. Carbon isotope stratigraphy and depositional oxia through Cenomanian-

- Turonian boundary sequences (Upper Cretaceous) in New Zealand. *Cretaceous Research*, 40, 61–80, 2013
- Kanematsu M, Young T, Fukushi K, Green P, and Darby J Arsenic (III, V) adsorption on a goethite-based adsorbent in the presence of major co-existing ions: Modeling competitive adsorption consistent with spectroscopic and molecular evidence. *Geochimica et Cosmochimica Acta*, 106, 404–428, 2013
- Nishiyama, R. Munemoto, T and Fukushi, K. Formation condition of monohydrocalcite from CaCl₂-MgCl₂-Na₂CO₃ solutions. *Geochimica et Cosmochimica Acta*, 100, 217–231, 2013
- Fukushi, K. Aoyama, K. Yang, C. Kitadai, N. and Nakashima, S. Surface complexation modeling for sulfate adsorption on ferrihydrite consistent with in-situ infrared spectroscopic observations. *Applied Geochemistry*, 36, 92–103, 2013
- Nagao, S. Kanamori, M. Ochiai, S. Tomihara, S. Fukushi, K. and Yamamoto, M. Export of ¹³⁴Cs and ¹³⁷Cs in the Fukushima river systems at heavy rains by Typhoon Roke in September 2011. *Biogeosciences*, 10, 6215–6223, 2013
- Fukushi, K. Hasegawa, Y. Maeda, K. Aoi, Y. Tamura, K. Arai, S. Yamamoto, Y. Aosai, D. and Mizuno, T. Sorption of Eu (III) on granite: EPMA, LA-ICP-MS, batch and modeling studies. *Environmental Science and Technology*, 47, 12811–12818, 2013
- 山科友紀・福士圭介 微量のセシウムを取り込んだスマクタイトからの主要陽イオンによるセシウム溶出挙動 粘土科学, 51, 88–94, 2013
- 林遼・長谷部徳子・柏谷健二・伊藤一充・糸野妙子・小形学・田村明弘, 余呉湖沼堆積物の光励起ルミネセンス年代測定と環境変動解析 OSL dating and environmental change analyzed on lacustrine sediments from Lake Yogo, フィッショングラフニュースレター, 27, in press
- 本田千晶・長谷部徳子・松木篤・水上知行・田村明弘・伊藤健太郎・岩田尚能・石川尚人, 原子間力顕微鏡を用いた東南極リュツォ・ホルム岩体のジルコンFT年代測定 Fission track dating on zircons from Lützow-Holm complex of East Antarctica by atomic force microscopy, フィッショングラフニュースレター, 27, in press
- Gang Li, Hisao Ando, Hitoshi Hasegawa, Masanobu Yamamoto, Takashi Hasegawa, Tohru Ohta, Noriko Hasebe, and Niiden Ichinnorov, Confirmation of a Middle Jurassic age for the Eedemt Formation in Dundgobi Province, southeast Mongolia: constraints from the discovery of new spinicaudatans (clam shrimps), Alcheringa: An Australasian Journal of Palaeontology, DOI:10.1080/03115518.2014.870834, 2014
- Yamada, M., Nakamura, K., Kameda, T., Kobayashi, F., Matsuki, A., Tsuiki, H., Higaki, S., Iwasaka, Y., Hayakawa, K., Function of rayon fibers with metallophthalocyanine derivatives: Potential of low-molecular weight polycyclic aromatic hydrocarbon removal and *Bacillus* sp. Removal, *Chemical and Pharmaceutical Bulletin*, in press.
- Tamamura, S. Takada, T. Tomita, J. Nagao, S. Fukushi, K. and Yamamoto, M. Salinity dependence of ²²⁶Ra adsorption on montmorillonite and kaolinite. *Journal of Radioanalytical and Nuclear Chemistry*, 299, 569–575, 2014
- Aoi, Y. Fukushi, K. Itono T. Kitadai N. Kashiwaya K. Yamada H. Hatta T. and Manpuku Y. Distribution and mineralogy of radioactive Cs in reservoir sediment contaminated by the Fukushima nuclear accident. *Journal of Mineralogical and Petrological Sciences*, 109, 23–27, 2014
- Kitadai N. Sawai T. Tonoue R. Nakashima S. Katsuma M. and Fukushi K. Effect of ions on the OH stretching band of water as revealed by ATR-IR spectroscopy. *Journal of Solution Chemistry*, 43, 1055–1077, 2014
- Fukushi K., Sakai H., Itono T., Tamura A. and Arai S. Desorption of intrinsic Cesium from Smectite: Inhibitive Effects of Clay Particle Organization on Cesium Desorption. *Environmental Science and Technology*, 48, 10743–10749, 2014
- Munemoto T., Fukushi K., Kanzaki Y. and Murakami T. (2014) Redistribution of Pb during transformation of monohydrocalcite to aragonite. *Chemical Geology*, 387, 133–143

総説、解説、報告書

生物学コース

- 西川潮 編 (2014) 平成23～25年度自然再生学講座報告書『トキを象徴種とした里地の社会生態システムの再生』新潟大学朱鷺・自然再生学研究センター, 佐渡市
- 鈴木信雄, 関 あづさ, 服部淳彦
メラトニンの骨代謝に対する作用と骨疾患の治療への応用. 抗加齢医学会誌, 10, pp.697–702 (2014)
- H. Satake M. Aoyama T. Sekiguchi T. Kawada
Insight into molecular and functional diversity of tachykinins and their receptors. *Protein Pept. Lett.*, 20, pp.615–627 (2013)
- 服部淳彦, 池亀美華, 矢野幸子, 染井正徳, 鈴木信雄
宇宙メラトニン研究と抗加齢医学との接点.
抗加齢医学会雑誌, 9, pp.356–363 (2013)
- 鈴木信雄, 大森克徳, 井尻憲一, 北村敬一郎, 根本鉄, 清水宣明, 笹山雄一, 西内巧, 染井正徳, 池亀美華, 田畠純, 中村正久, 近藤隆, 古澤之裕, 松田恒平, 田渕圭章, 高崎一朗, 和田重人, 安東宏徳, 笠原春夫, 永瀬睦, 久保田幸治, 土屋美和, 谷川直樹, 吉馳重徳, 大嶋一成, 鈴木徹, 遠藤雅人, 竹内俊郎, 江尻貞一, 小萱康徳, 佐藤和彦, 渡邊竜太, 森部綱嗣, 三島弘幸,

前田齊嘉, 内田秀明, 田谷敏貴, 林明生, 中村貞夫, 杉立久仁代, 芹野 武, 鳴津 徹, 矢野幸子, 関 あずさ, 舟橋久幸, 奈良雅之, 服部淳彦
魚類のウロコを用いた宇宙生物学的研究：新規メラトニン誘導体のウロコ及び骨疾患ラットの骨代謝に対する作用. Space Utilization Res., 28, pp.165-168 (2012)

H. Satake T. Sekiguchi
Toll-like receptors of deuterostome invertebrates. Front Immunol., 3, p34 (2012)

鈴木信雄, 舟橋久幸, 耿 啓達, 柿川真紀子, 山田外史, 廣田憲之, 北村敬一郎, 清水宣明, 早川和一, 三島弘幸, 岩坂正和, 上野照剛, 大森克徳, 矢野幸子, 池亀美華, 田渕圭章, 和田重人, 近藤 隆, 服部淳彦
魚類のウロコを用いた評価系の開発と骨代謝研究への応用. まぐね/Magnetics Jpn., 7, pp.174-178 (2012)

関口俊男
カタユウレイボヤにおける cionin 受容体の分子機能解析：脊椎動物 CCK/gastrin family の進化的起源について, 比較内分泌学雑誌 146, pp.163-166 (2012)

山田敏弘. 2013. 種子植物の葉と種皮—扁平な兄弟器官の進化. 遺伝 67: 45-49.

山田敏弘. 2013. 地上植物の体作りに起きた革新を解き明かす—エボデボ研究の挑戦. 遺伝 67: 20-24.

木矢剛智
昆虫脳の神経活動可視化法の開発と本能行動を規定する神経メカニズムの解明. 金沢大学 学際科学実験センター ニュース 2013.1 第10号

Wada, N., Matsugo, S. and Sakamoto, T. (2013) Multiple roles of photosynthetic and sunscreen pigments in cyanobacteria focusing on the oxidative stress. Metabolites 3:463-483.

福森 義宏, 田岡 東
磁性細菌オルガネラ「マグネットソーム」の構造機能相関の解明, 生物物理 54 (1): 11-14 (2014).

福森 義宏
アトモスフィア:「生化学実験」と「モノづくり」のイノベーション, 生化学 85 (11): 959 (2013).

Akematsu T, Kobayashi T, Osada E, Fukuda Y, Endoh H, Pearlman ER (2012)
Programmed nuclear death and its relation to apoptosis and autophagy during sexual reproduction in *Tetrahymena thermophila*.
Jpn. J. Protozool, 45, 1-15.

Wong RW (2014)
Epigenetic regulation by nuclear pore complex in cancer progression The NOVARTIS foundation (Japan) Annual Report pp.62-64.

Wong RW (2014)
大腸癌の発生・進展における核膜孔複合体因子の役割の解析 癌と人 第41号 pp.58-59

Wong RW (2013)核膜孔複合体によるエピジェネティクス制御上原記念生命科学財団研究報告集27:86 pp.1-4

Wong RW (2012)
Rae1 の乳がんモデルトランスジェニックマウスによる癌悪性化機構の解析. 財団法人旭硝子財団報告書 (ISSN 1882-0069) e34.

バイオ工学コース

仁宮一章: 新炭素繊維材 石川で研究, 北國新聞, 2014年10月15日

仁宮一章: 植物から炭素繊維材料, 北國新聞, 2014年10月1日

K. Ninomiya, S. Omote, K. Satoh, I. Narumi, N. Shimizu. Simultaneous saccharification and fermentation from ionic liquid-pretreated biomass using ionic liquid tolerant yeast mutant, JAEA Takasaki Annual Report 2012, 115, (2014) Mar.

川嶋聰, 仁宮一章, 清水宣明: ヒト肝がん細胞を認識するDNAアプタマーの進化工学的な探索とその改良. 金沢大学環日本海域環境研究センター 平成24年度年報, 87-91, 2014, Jan

前川幸, 仁宮一章, 清水宣明: がん細胞認識能を付与した超音波応答性バブルミセルを用いたがん治療法. 金沢大学環日本海域環境研究センター 平成24年度年報, 92-97, 2014, Jan

福田, 仁宮一章, 清水宣明: がん細胞認識能を付与した二酸化チタンナノ粒子を用いた超音波力学的がん治療法. 金沢大学環日本海域環境研究センター 平成24年度年報, 98-102, 2014, Jan

仁宮一章, 清水 宣明: がん細胞と特異的に結合する超音波刺激応答性リポソームの創製, 超音波テクノ, 25 (5), 46 – 51, (2013) Oct.

青森有香, 大澤浩二, 仁宮一章, 高橋憲司: イオン液体とラジカルを用いたリグノセルロースリファイナリー, 化学工業, 64 (6), 38-45 (2013) June.

仁宮一章, 清水 宣明: 超音波刺激応答性リポソームによる抗がん剤投与システム, ケミカルエンジニアリング, 58 (4), 34-37 (2013) March.

青森有香, 仁宮一章, 高橋憲司: イオン液体を用いたバイオマスリファイナリー, 化学工業, 64 (2), 45-51 (2013) Feb.

仁宮一章: 「 TiO_2/US 法によるリグニン処理」と「重イオンビームによる“超進化型”酵母」を用いたリグノセルロース由来バイオ燃料の効率的生産プロセス」ゼネラル石油研究奨励財団研究報告書(第15号) 50-53, (2013) Feb.

K. Ninomiya, T. Nomura, K. Satoh, I. Narumi, N. Shimizu. FACS-based Screening for Yeast Clone Highly Expressing Cellulase, JAEA Takasaki Annual Report 2011, 108, (2013) Jan.

松本真実, 仁宮一章, 清水宣明: NK4を発現するビフィズス菌株の構築とその特性評価. 金沢大学環日本海域環境研究センター 平成23年度年報, 93-96, 2013, Jan

岩倉和希, 仁宮一章, 清水宣明: Cell-SELEX法を用いたヒト乳腺がん細胞に対するDNAアプタマーの選抜. 金沢大学環日本海域環境研究センター 平成23年度年報, 97-100, 2013, Jan

野田恭平, 仁宮一章, 清水宣明: 酸化チタン表面での超音波力学的OHラジカル生成と複合周波数の促進効果. 金沢大学環日本海域環境研究センター 平成23年度年報, 101-104, 2013. Jan

曾田裕司, 仁宮一章, 清水宣明: 低毒性イオン液体の特徴を生かしたバイオマスの前処理・糖化醸酵プロセス. 金沢大学環日本海域環境研究センター 平成23年度年報, 105-108, 2013. Jan

仁宮一章: 里山と共に生きる – 里山バイオマスリファイナリーを目指して, 北國新聞, 2012年11月10日

高橋憲司, 仁宮一章, 萩野千秋, 清水 宣明: イオン液体と超音波を組み合わせたリグノセルロース前処理によるバイオマス・リファイナリー, バイオインダストリー, 29 (5), 38-45 (2012) May.

浅野真, 植田典巳稚, 仁宮一章, 高橋憲司: ラジカル反応を利用したリグニン低分子化による有効利用, バイオインダストリー, 29 (5), 46-52 (2012) May

仁宮一章: 液状の木, 生物工学会誌 バイオミディア, 90 (2), 94, (2012) Feb.

清水 宣明, 仁宮一章: 腫瘍認識型 TiO₂ナノ粒子と超音波触媒法をカップリングさせた臓器温存型がん治療法, 鈴木謙三記念医科学応用研究財団 報告2010, 29, 90-94, (2012) Jan.

K. Ninomiya, H. Soda, K. Satoh, I. Narumi, N. Shimizu. Repeated FACS-based Screening for Yeast Strain Highly Expressing Cellulase, JAEA Takasaki Annual Report 2010, 111, (2012) Jan.

塩麹—温故知新の調味料— 山本晋平, 松郷誠一 New Food Industry, 54 (10), 69-83, 2012

生理活性物質リポ酸の科学と応用 生田直子, 松郷誠一 New Food Industry, 55 (7), 1-17, 2013

R- α -リポ酸のシクロデキストリンによる包接安定化と吸収性向上機構 生田直子, 松郷誠一 ファインケミカル 42 (11), 13-19, 2013

リポ酸のAktシグナル活性化による中枢神経保護作用機構 郡山恵樹, 松郷誠一 New Food Industry, 56 (4), 35-43, 2014

リポ酸の細胞内シグナルトリガー化合物としての新たな知見 New Observation of Lipoic Acid as a Signal Transduction Trigger in the Cell 郡山恵樹, 松郷誠一 ビタミン, 88 (2) 99-101 (2014)

Naoki Wada, Toshio Sakamoto, Seiichi Matsugo. Antioxidative sunscreen pigments in cyanobacteria, Metabolites, 3, 463-483 (2013)

物質循環工学コース

田村和弘

超臨界二酸化炭素を用いたポリマー染着プロセスにおける物性値の解明, 科学研究費補助事業, 基盤研究 (C), 研究成果報告書, pp. 1-5 (2014.6).

田村和弘

超臨界二酸化炭素利用プロセスにおける平衡物性の最近の動向と展望, 化学工学, 77 (7) pp.490-493 (2013)

小林史尚

南極観測隊体験記 – 第54次南極地域観測隊公開利用研究「南極域の風送バイオエアロゾル実相調査」-, 日本生物工学会中部支部BB Chubu, 2013年4月号, p.3-7 (2013)

畠山多加志, 「分子モデル・流動特性・シミュレーション」, 成形加工 26, 452-455 (2014).

畠山多加志, 新田晃平, 「固体基本特性 - 高分子の結晶ラメラ構造に対する非晶高分子鎖の運動性と統計性の影響 -」, 成形加工 25, 327-330 (2013).

汲田幹夫, 化学工学年鑑2012, 10. 資源・エネルギー, 10.2 蓄熱・ヒートポンプ, 化学工学, Vol.76, pp.620-621 (2012)

東秀憲, 化学工学年鑑2013, 9. 超臨界流体, 9.2 基礎物性, 化学工学, Vol.77, pp.727-728 (2013)

地球学コース

宮下純夫・海野 進, 2014. 海洋下部地殻への挑戦: 1256D掘削孔での成果 (Exps 309/312/335). 月刊地球号外, 64, 74 - 80.

荒井章司, 2013. サイエンスとしてのマントル掘削: そのインパクトと展望. (Mantle drilling as a science: its impact and perspective). 地球化学 (Chikyukagaku (Geochemistry)), 47, 167-170.

草野有紀・海野 進 (訳)海野 進・ケンニールソン・バーナードウッド, 2013. 月より遠いマントルへの道. パリティー, 66. 丸善出版, 東京.

Umino, S., Nealson, K. and Wood, B., 2013. Drilling to Earth's mantle. Physics Today, 66, 8, 36-41.

Sumita, I., Bergman, M. I., Inner-Core Dynamics, Schubert, G. (ed.) in Treatise on Geophysics (second edition), Oxford: Elsevier Ltd (in press).

隅田育郎, 安田奈央, 柴野靖子, 道岡弘樹, 並木敦子, 液体中における密に詰まった粉粒体の重力不安定, 混相流 特集: 粒子の流れ (1), Vol. 28, No. 3, pp. 304-311 (及び巻頭口絵) (2014.9).

一般社団法人国立大学協会編集 (金沢大学 (平松良浩)), 東日本大震災後の日本海側の災害リスク, 国立大学の東日本大震災復興支援, pp. 43, (2013.3).

平松良浩, 石原吉明, 山本真行, 古本宗充, 藤田和央, 「はやぶさ」リエントリー時のインフラサウンド・地震動観測, 月刊地球, Vol. 34, No. 10, pp. 560-565, (2012.10).

清水宏信, 平松良浩, 川崎一朗, D"層の低次ゾーナル不均質から予想される自由振動の固有周波数の緯度依存性に対する否定的証拠, 月刊地球, Vol. 34, No. 8, pp. 453-458, (2012.8).

田中 剛・長谷部徳子, 韓国で外国人研究者工業視察に参加して, GSJ地質ニュース, 3, 245-247, 2014 福士圭介, 黒雲母によるレアアースの吸着, マテリアルステージ, 2014年4月号, 44-46, 2014

著書

生物学コース

植田邦彦編著

植物地理の自然史—進化のダイナミクスにアプローチする—, 200pp., 北海道大学出版会, (2012)

植田邦彦

東海丘陵要素の植物地理, pp. 108-113. In: 日本植物分類学会監修, 戸部博・田村実編『新しい植物分類学 I』238pp., 講談社, (2012)

Usio N, Miyashita T eds. (2015) "Social-ecological restoration in paddy-dominated landscapes", Ecological Research Monographs, Springer, Tokyo. ISBN 978-4-431-55329-8

Usio N (2015) Environmentally friendly farming in Japan: introduction. In: Usio N, Miyashita T eds. "Social-ecological restoration in paddy-dominated landscapes", Ecological Research Monographs, Springer, Tokyo, DOI 10.1007/978-4-431-55330-4_5

Usio N, Saito R, Akanuma H, Watanabe R (2015) Effectiveness of wildlife-friendly farming on aquatic macroinvertebrate diversity on Sado Island in Japan. In: Usio N, Miyashita T eds. "Social-ecological restoration in paddy-dominated landscapes", Ecological Research Monographs, Springer, Tokyo, DOI 10.1007/978-4-431-55330-4_7

Usio N, Miyashita T (2015) Synthesis. In: Usio N, Miyashita T eds. "Social-ecological restoration in paddy-dominated landscapes", Ecological Research Monographs, Springer, Tokyo, DOI 10.1007/978-4-431-55330-4_20

Tsuge T, Nakamura S, Usio N (2015) Assessing the difficulty of implementing wildlife-friendly farming practices by using the best-worst scaling approach. In: Usio N, Miyashita T eds. "Social-ecological restoration in paddy-dominated landscapes", Ecological Research Monographs, Springer, Tokyo, DOI 10.1007/978-4-431-55330-4_15

西川 潮 (2012) 淡水生態系－多様性、変動性、閾値に配慮したマネジメント. 『エコシステムマネジメント－包括的な生態系の保全と管理へ－』(森章 編著). 共立出版, 東京都, pp.218-237.

西川 潮 (2012) 外来生態系エンジニアによる淡水生態系のレジームシフト. 『淡水生態学のフロンティア』シリーズ現代の生態学9巻(吉田丈人, 鏡味麻衣子, 加藤元海 編著). 共立出版, 東京都, pp.184-194

N. Suzuki, T. Sakamoto

Preface: Comparative and general aspects of calcium homeostasis and its hormonal regulations. In "Evolution of calcium homeostasis and its hormonal regulation in vertebrates". Suzuki, N. and Sakamoto, T., eds. Virtual special issues in Zoological Science (2012)

Takumi Suzuki and Masafumi Iwami (2012) Insulin-

related peptides in insects and other arthropods. In "Hemolymph proteins and functional peptides: Recent advances in insects and other arthropods" (Eds. Muhammad Tufail and Makio Takeda), pp161-171. Bentham Science Publishers, Oak Park, IL, USA.

遠藤 浩, 増田光平 (2014)

織毛虫テトラヒメナによるセルロース分解系の構築.

原生生物フロンティア～その生物学と工学～(洲崎敏伸／編), 第10章, pp.131-143. 化学同人

バイオ工学コース

仁宮一章, 滝口昇: “第4章培養状態の計測・制御”. 実践 有用微生物, NTS, 東京, (2014). July.

大政健史, 仁宮一章, 萩野千秋, 滝口昇, 中島田豊: “基礎から学ぶ生物化学工学演習”(日本生物工学会編)コロナ社, 東京 (2013) Sep.

生田直子 松郷誠一: 機能性素材シクロデキストリンによる安定化と吸収性向上 “シクロデキストリンの科学と技術” CMC出版 (2013) 12月

物質循環工学コース

H. Watanabe, Y. Matsumiya, K. Horio, Y. Masubuchi and T. Uneyama, "Rheo-Dielectric Behavior of Soft Matters", chap. 2, pp. 37-87, in "Non-Equilibrium Soft Matter Physics", S. Komura and T. Ohta eds. (World Scientific, Singapore, 2011)

畠山多加志, 「高分子ナノテクノロジーハンドブック」第5編 第8章「ソフトポテンシャルモデル」, pp. 811-816 (NTS, 2014) [NTS].

畠山多加志, 「フィルム成形・加工とトラブル対策 - プロセス改善・条件設定便覧-」第3章 第1節「分子モデルによる流動特性のシミュレーション」, pp. 123-126, (技術情報協会, 2013)

M.Kuriyagawa, K.Nitta, Structural characteristics of polyethylenes, Structure and Properties of Polyolefin Materials Ed. by K. Nitta, M. Kuriyagawa, Kerela, India, Transworld Research Network, Chap1 pp.1-23, (2012).

K.Nitta, Mechanical properties of polyolefin solids, Structure and Properties of Polyolefin Materials Ed. by K. Nitta, M. Kuriyagawa, Kerela, India, Transworld Research Network, Chap5 pp.125-152, (2012).

新編化学工学, 架谷昌信監修, 板谷義紀編集, 第3章 熱移動, 3.1 伝熱の基礎, pp.63-76, 渋田幹夫, 共立出版, (2012.3)

地球学コース

奥野正幸

地球科学と鉱物結晶の非晶質化. 分担, 「日本の結晶学(II) - その輝かしき発展 -」 pp 153-154, 日本結晶学会2014年ISBN 978-9903861-2-2

奥寺 浩樹

結晶構造と化学結合・原子変位量. 分担, 「日本の

結晶学（II）－その輝かしき発展－』 pp 166–167, 日本結晶学会 2014 年 ISBN 978-9903861-2-2

Morishita, T., Nakamura, K., Shibuya, T., Kumagai, H., Sato, T., Okino, K., Sato, H., Nauchi, R., Hara, K. and Takamaru, R (2014) Petrology of peridotites and related gabbroic rocks around the Kairei hydrothermal field in the Central Indian Ridge. In Subseafloor Biosphere Linked to Hydrothermal Systems: TAIGA Concept (Ishibashi, J., Okino, K. and Sunamura, M. eds), Springer, in press.

青矢 瞳月・野田 篤・水野 清秀・水上 知行・宮地 良典・松浦 浩久・青木 正博・利光 誠一・遠藤 俊祐, 2013. 新居浜地域の地質. 地域地質研究報告 (5万分の1地質図幅). 産総研地質調査総合センター.

海野 進, 2012. 無人岩と島弧の誕生. 日本の世界遺産, 朝日新聞出版, 東京, 1, 32 – 33.

入月俊明・神谷隆宏, 2013. 貝形虫. 尾田太良・佐藤時幸 (編)「微化石研究マニュアル」, 61–64, 朝倉書店 110pp.

ロバート・ジェンキンズ, 2013. 化学合成生態系の進化を追うー深海底は生きものだらけ? -. 中村圭子編 生命誌年刊号 vol.73–76 変わる. p. 158–167.

福士圭介 (分担執筆), 土壤中の鉱物におけるCs吸着 ハンドブック, 星雲社, 2014

特許、実用新案

生物学コース

山田外史, 鈴木信雄, 柿川真紀子, 北村敬一郎, 服部淳彦
骨疾患治療用磁場発生装置及び、それを用いた骨疾患治療の評価及び開発システム
日本国特許 4992015 (2012年5月18日)(出願日 2007年2月19日)

浜崎 景, 鈴木信雄
骨芽細胞活性抑制剤. 日本国特許 4575105 (2010年8月27日)(出願日 2004年10月7日)

染井正徳, 服部淳彦, 鈴木信雄
トリプトファン誘導体及びその用途.
特願2005-209753 (出願日 2005年7月20日)
国際特許 Tryptophan derivative and application thereof 米国特許 (4,382,888) と中国特許 (200680026616.X) (出願日 2008年1月17日)

染井正徳, 服部淳彦, 鈴木信雄
インドール誘導体及びその用途
日本国特許 4014052 (2007年9月21日)(出願日 2004年3月8日)
国際特許 Indole derivative and application thereof 米国特許 (8,053,462) (2011年11月8日) (出願日 2006年9月8日) 欧州特許 (1911744) (スイス, ドイツ, フランス, イギリス) (2013年)

石原賢司, 山下倫明, 渡邊竜一, 鈴木敏之, 坂本敏夫, 松郷誠一, 和田直樹, 竹中裕行, 山口裕司
マイコスボリン様アミノ酸及びその製造方法, 紫外線防護材, 並びに抗酸化剤. 特願2013-105285

(2013/05/17)

東 (遠藤) 浩

発明の名称: 微細藻類バイオマスを原料とするバイオ燃料の製造方法
出願番号: 特願2013-142868

バイオ工学コース

覚知亮平, 仁宮一章, 柴田佳樹, 鵜澤潔, 高橋憲司: 多糖類誘導体の製造法, 特願 2014-218237, (2014/10/27)

高橋憲司, 仁宮一章: イオン液体の分離方法, 特願 2013-0023 (2013/8/28)

仁宮一章, 東浩, 守屋繁春, 増田光平: 微細藻類バイオマスを原料とするバイオ燃料の製造方法, 特願 2013-142868 (2013/7/8)

仁宮一章, 高橋憲司, 清水宣明: バイオマスの前処理法, 特願2010-235045 (2010/10/20), 特開2012-86154 (2012/5/10)

石原賢司, 山下倫明, 渡邊竜一, 鈴木敏之, 坂本敏夫, 松郷誠一, 和田直樹, 竹中裕行, 山口裕司. マイコスボリン様アミノ酸及びその製造方法, 紫外線防護材, 並びに抗酸化剤. 特願2013-105285 (2013/05/17)

物質循環工学コース

比江嶋祐介 他2名, 発光性ナノカーボン製造方法および製造装置, 特願2014-053564.

新田晃平 他3名, ナノファイバーによる連続シートの製造方法, 特許公開2013-64203.

Tatsuya Moriguchi, Isamu Iwashita, Masahito Uematsu, Kimitake Itou, Koh-hei Nitta, Takanobu Kawamura, Biaxially oriented polypropylene film, Patent No.12002941.8-2102, Euro Patent (2012).

新田晃平 他3名, ポリオレフィン樹脂組成物及びポリオレフィン樹脂用造核剤マスターbatch, 特許公開2012-111883.

池田 卓司, 大谷 吉生, 古内 正美, 瀬戸 章文, 浮遊微粒子モニタリング装置, 出願 2011-130001 (2011/06/10) 公開 2012-255743 (2012/12/27)

池田 卓司, 大谷 吉生, 古内 正美, 瀬戸 章文, 慣性フィルタ, 出願 2011-136696 (2011/06/20) 公開 2013-000703 (2013/01/07)

遠藤 哲夫, 藤岡 友美, 瀬戸 章文, 大谷 吉生, 帯電粒子の帶電量特定装置, 出願 2011-177693 (2011/08/15) 公開 2013-040845 (2013/02/28)

遠藤 哲夫, 藤岡 友美, 山崎 喜郎, 瀬戸 章文, 大谷 吉生, 除電除塵装置と除電除塵方法, 出願 2011-177683 (2011/08/15) 公開 2013-041744 (2013/02/28)

汲田幹夫, 松井康一, 諏訪祐司, シリカ添着基材及びその製造方法, 特願2012012-158326, (2012)

地球学コース

Keisuke Fukushi, Minoru Sakai; Takashi Munemoto, Arsenic sorbent for remediating arsenic-contaminated material, Patent No.: US8,227,378B2 (米国特許) Date of Patent: Jul. 24, 2012, Assignee:

National University Corporation Kanazawa University

福士圭介・長谷川優介・前田耕志・水野崇・山本祐平・青才大介, 黒雲母を用いた希土類元素の濃縮方法, 特許公開 2013-204104 公開日 2013/10/7, 出願人
国立大学法人金沢大学・独立行政法人日本原子力研究開発機構

福士圭介・八木新大朗, リン回収剤及びそれを用いた排水の浄化方法, 特許5618064号, 登録日 2014/09/26, 出願人 国立大学法人金沢大学

福士圭介・酒井実・宗本隆志, ヒ素収着材及びヒ素汚染物質の浄化方法, 特許5548956号, 登録日 2014/05/30, 出願人 国立大学法人金沢大学

